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Educational Measurements

COMPILED BY

The Bureau of Coöperative Research

INDIANA UNIVERSITY

1923

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Foreword

THIS bibliography is compiled for the double purpose of listing all efforts, as far as they have come to our attention, that have been made in the United States to develop achievement tests, and of giving a brief description of each test, including in the description not only an analysis of the test and its purpose but also available information concerning the range of the test, administration cost of the test in money and in time, information as to the time of year in which it was standardized, the publisher of the test, and the date of publication. This description in each case is based upon the author's statements. No effort has been made to check the accuracy of the author's statement and no effort has been made to evaluate the tests themselves. It is recognized that some of the tests are almost, if not wholly, worthless. Nevertheless, they have been given equal rank with those of distinctive merit in that the alphabetical method of listing has been used, and no statement has been made as to quality of the test. The danger of such a procedure is recognized, but even in the face of this danger we feel that the procedure is justified. There seems to be a need for bringing together under one cover a list, as nearly complete as possible, of all achievement tests that have been developed in the United States in recent years. This list should serve as a basis for the next most important step of sifting out the poor tests and of bringing forcibly to the attention of prospective users of tests those of greatest merit.

HENRY LESTER SMITH,
Director of the Bureau of Coöperative Research.

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Bibliography of Educational Measurements

ALGEBRA

Childs' Algebra Test. By H. G. Childs. Published: 1917. Purpose: to test achievement in first-year algebra. Range: first-year algebra. Time to give: 47 minutes. Time to score: short. Standardized: at end of year.

The test consists of 12 parts: (1) Subtraction; (2) Multiplication; (3) Simple equations; (4) Division; (5) Transposition; (6) Collecting; (7) Stating equations; (8) Clearing of fractions; (9) Fractional equations; (10) Factoring; (11) Simultaneous equations; (12) Stating fractional equations. This test was devised for use in the Indiana high schools and has never been printed for general distribution.

Publisher: Extension Division, Indiana University, Bloomington, Ind.

Price: not published for general distribution.

Coleman's Scale in Algebra. By W. H. Coleman. Published: no information. Purpose: to measure pupil's ability in first-year algebra. Range: first-year algebra. Time to give: 30 minutes. Time to score: short. No information as to time standardized.

The scale is composed of 20 problems including the essential elements of first-year algebra. The problems are presented in approximately the order followed by standard texts. Each contains as many forms of its class of work as possible. There is little duplication of the same kind of work. They have a nearly uniform increase in difficulty, the time required for solution receiving consideration. Space for solution is left at the foot of the page. No other paper is to be used. One scale is needed for each pupil to be tested. Directions for giving and a key for scoring are available.

Publisher: Extension Division, University of Nebraska, Lincoln, Neb.

Price: Tests, 2 cents each; keys, 3 cents each; directions, 3 cents each.

Calibrated Objective Tests—Revised Hurdles, 1921. By Murray A. Dalman, Director of Reference and Research, Public Schools, Indianapolis, Ind. This test has never been published for general distribution.

Douglas Series of Diagnostic Tests for First-Year Algebra. By H. R. Douglas. Published: 1921. Purpose: Diagnostic. Range: grade 9. Time to give: Series A, 40 minutes for either form; Series B, 12 to 15 minutes. Time to score: Series A, 1 to 2 minutes for all tests; Series B, about 20 seconds to each test. Standardized: Series A, end of first semester in algebra; Series B, end of second semester in algebra.

The tests are made up of 2 series, A and B, each containing 2 forms, either of which may be used. According to the author, "These tests differ from other algebra scales in two respects: (1) They measure

accuracy or power and not rate of speed; (2) They permit of specific diagnosis." Each form is composed of 4 tests of 4 problems each. For example, Series A, Form II, consists of the following tests: (1) Addition and subtraction; (2) Multiplication; (3) Division; (4) Simple equations. Only answers that are exactly correct are counted. One test of each used is needed for each pupil to be tested. Directions for use are available.

Publishers: C. A. Gregory, University of Oregon, Eugene, Ore.

Price: Series A, price per 100 folders including directions, \$1.60; record sheets, 3 cents each; Series B, price per set of 7 tests, 4 cents, or \$3.50 per 100; price per set of 5 tests (1-5), 3 cents, or \$2.50 per 100; record sheets, 3 cents each; directions free; one complete copy with directions and score key, 15 cents.

Hotz's Algebra Scales. By Henry G. Hotz. Published: 1918. Purpose: to indicate attainment, to measure progress, and to diagnose difficulties. Range: first-year algebra. Time to give: not a "time limit" test. Time to score: 30 seconds for each test of Series "A"; 60 seconds for each test of Series "B". Standardized: tentative standards established for pupils having had algebra 3 months, 6 months, and 9 months.

The scales are composed of 5 different tests: (1) Addition and subtraction, (2) Multiplication and division, (3) Equation and formula, (4) Graphs, (5) Problems. Each scale is composed of 2 series except the graph scale, which contains only one. Series B is longer than Series A and contains from 11 to 25 exercises in each scale. Series A, about half as long as Series B, may be used when time is limited. Scale B is best for diagnostic purposes. The manual of directions contains all necessary instructions, including key and norms. One copy of each scale sheet is required for each pupil to be tested.

Publishers: Bureau of Publication, Teachers College, Columbia University, New York City.

Price: 70 cents per 100. Graph scale, \$1.25 per 100. "Manual of Directions for First-Year Algebra", by Henry G. Hotz, 75 cents.

A Test in Algebra. By Los Angeles Public Schools. Published: 1919. Purpose: to measure attainment in first-year algebra. Range: 9A (second half-year). Time to give: 40 minutes. Time to score: no information. Local standards.

The test is composed of 15 problems. The problems are selected in such a way as to test the pupil's ability to handle the different parts or phases of first-year algebra.

Publisher: Board of Education, Los Angeles, Calif.

Price: not published for general distribution.

Standardized Research Tests in Algebra. By W. S. Monroe. Published: 1915. Purpose: to measure ability to solve simple algebraic operations. Range: secondary schools. Time to give: 1 to 2 minutes each. Time to score: short. Standardized: end-of-year standards.

There are 6 separate tests, as follows: (1) Multiplication, (2) Reduction to a common denominator, (3) Division, (4) Transposition, (5)

Collecting terms, (6) Solving equation. Both speed and accuracy are measured. The number of problems attempted is counted to determine the speed and the number correct to determine the accuracy. No credit is allowed for problems partly correct. Test 6 is more complex than the others. Space for solution is provided on the same page with the problems. The answer is to be written in a space especially prepared at the right of the problem. Instructions for giving, and record sheets, with standard scores on back, are available. One test is needed for each pupil to be tested.

Publishers: Kansas State Normal School, Emporia, Kan.

Price: \$1.50 per 100 copies of complete series, including all accessories. This test is out of print.

Illinois Standardized Algebra. Tests by W. S. Monroe and L. W. Williams. Published: 1920. Purpose: to measure speed and accuracy in finding the unknown x . Range: secondary school. Time to give: 4 to 10 minutes for each of 4 tests in a set. Time to score: short. Standardized: near end of first, second, and third semesters.

There are 4 separate tests of increasing complexity. The unknown x is to be found in each problem. Space for solution is left after each problem. To be correct each step is to be shown and the proper signs used. In the right-hand corner of each test, space is left for recording the number of problems right, and the number attempted. One test-sheet is needed for each pupil to be tested. Instructions for giving, a key for scoring, as well as record sheets, are available.

Publishers: Public School Publishing Co., Bloomington, Ill.

Price: \$2.50 per 100. One copy of scale for each pupil with complete directions.

Phillips' Algebra Tests. By F. M. Phillips. Published: 1914. Purpose: to measure improvement in certain mathematical abilities during a semester of college algebra. Range: first-year college. Time to give: 15 minutes. Time to score: about 2 minutes. Standardized: first test, opening of semester; 2d test, close of semester. The tests are out of print.

Rugg-Clark Standardized Tests in First-Year Algebra. By H. O. Rugg and J. R. Clark. Published: 1918. Purpose: diagnostic. Range: Booklet I, first semester, first-year algebra; Booklet II, second semester, first-year algebra. Time to give: 4 minutes to each test. Time to score: not timed. No information as to standardization.

There are 14 tests arranged in 2 pamphlets, and 2 supplementary tests: Test 15 for graphs, and Test 16 for quadratic equations. Each test is designed to measure the formal operations in algebra. The tests are "rate" or "time" tests, and the problems are so arranged that the rate can easily be determined. Preliminary tests are given one day previous to the regular test, so that pupils will be familiar with the procedure in testing. Directions and record sheets, including norms, are available. One scale is needed for each pupil to be tested.

Publisher: University of Chicago Bookstore, University of Chicago, Chicago, Ill.

Price: 8 cents a set; sample set, 12 cents each.

Rugg and Clark's Standardized Practice Exercises in First-Year Algebra. By H. O. Rugg and J. R. Clark. Published: 1918. Purpose: to diagnose difficulties and to furnish drill in algebra. Range: first-year algebra. Time to give: varies with the type of test, 2 to 8 minutes for each of the 14 exercises. Standardized: no information as to time standardized.

The practice exercises consist of a series of 14 tests on 7 cards, composed of type problems to be used to test speed and accuracy, and not for drill. For example, Set No. 5 is composed of 15 problems in subtraction. Ten should be solved correctly in 3 minutes. The exercises are teaching devices as well as tests. The answers are on back of each card. One set of 14 exercises is needed for each pupil to be tested. Instructions and record cards are furnished with the tests.

Publisher: University of Chicago Bookstore, University of Chicago, Chicago, Ill.

Price: 12 cents a set of 14 exercises; record sheets, $\frac{1}{2}$ cent each.

Stromquist's Algebra Tests. By C. E. Stromquist. Published: spring of 1918. Purpose: to measure pupil's speed and accuracy in algebra. Range: high school. Time to give: first 4 tests, 4 minutes each; Tests 5 and 6, 5 minutes each; Test 7, 10 minutes. Time to score: 20 to 30 minutes. Standardized: no information as to time standardized.

The tests are made up of 7 parts, as follows: (1) Application of formulae, (2) Division, (3) Simple equations in one unknown, (4) Simple simultaneous equations, (5) Factoring, (6) Numerical substitution, (7) Forming equations. Answers are wholly right or wholly wrong, except that on Test 4, one-half credit is to be given for the correct answer to either unknown. No problems are to be rechecked for mistakes by the pupil. Work is to be done as rapidly as possible with care. One test is needed for each pupil to be tested. Score card as well as instructions will be found on each test sheet.

Publisher: University of Wyoming, Laramie, Wyo.

Price: \$2.75 per 100 copies; \$1.40 per 50 copies; 3 cents per single copy, plus transportation.

Thurston's Algebra Test. Copyrighted: 1919, by Carnegie Institute of Technology; 1922, by World Book Co. Range: high school seniors and college freshmen. Time to give: 30-minute limit.

Description: see Thurston's Vocational Guidance Tests.

Publisher: World Book Co., Chicago, Ill.

Price: \$1 per package of 25 tests, with one key and one record sheet.

ARITHMETIC

Automatic Exercises in Arithmetic. By ———— Arleigh. Crown Publishing Co., South Pasadena, Calif. No information in regard to this test was obtainable.

Bonser's Arithmetic Reasoning Test. By F. G. Bonser. Published: 1910. Purpose: to measure mathematical judgment. Range: grades 4, 5, and 6. Time to give: not "time limit" tests. Time to score: no information. Not standardized.

The test is composed of 20 problems arranged in 4 sets, stated as follows: 2 sets of 5 each, IA and IB, stated in the form usually followed in current textbooks in arithmetic; and 2 sets of 5 each, IIA and IIB, of the same difficulty as the preceding in processes involved but stated in a less conventional way. Each of the 10 problems in the first type may be called a "two-step" problem, requiring a preliminary operation to secure the intermediate data necessary to the final operation. The test has never been published for general testing purposes. This can be found in Teachers College Contribution to Education No. 37.

Boston Fraction Sheets. By Department of Educational Investigation and Research. Published: no information. This is drill material.

There are 4 tests, as follows: (1) Addition of common fractions, (2) Subtraction of common fractions, (3) Multiplication of common fractions, (4) Division of common fractions. Each test is made up of 10 forms. Each form in addition and subtraction contains 12 problems; those in multiplication and division contain 10 problems each.

Publisher: Department of Educational Investigation and Research, 34 Normal School Building, Huntington Ave., Boston, Mass.

Price: no information.

Determining the Achievement of Pupils in Addition, Subtraction, Multiplication, and Division of Fractions. By Boston Public Schools. Published: 1915. Purpose: to measure pupil's ability to handle the fundamental operations of fractions. Time to give: 2 to 5 minutes each. Time to score: short. No information as to standardization.

These 25 tests deal with the fundamentals of common fractions. The addition test, for example, is a folder containing 6 tests chosen in a way to measure the pupil's ability to handle all the combinations in addition. The subtraction folder contains 5 tests, and the multiplication and division folders contain 7 tests each. The tests are not available for general use.

Publishers: Department of Educational Investigation and Measurement, Boston Public Schools, Boston, Mass.

Price: not available for general distribution.

Buckingham's Scales for Problems in Arithmetic. By B. R. Buckingham. Published: 1919. Purpose: to measure reasoning ability. Range: grades 3 to 8. Time to give: not more than 60 minutes, not "time limit" tests. Time to score: approximately, 50 seconds. Standardized: mid-year standards.

The scale is composed of 3 tests or divisions: (1) grades 3 and 4, (2) grades 5 and 6, (3) grades 7 and 8. Each division is made up of 2 equivalent forms, of 10 problems each, arranged in order of difficulty. Each problem is weighted, values ranging from 2.7 to 9.4. Space is left below each problem for solution. No other paper is to be used. The answer is placed in a little square at the right of the problem. Directions for use are printed on the test. One test is needed for each pupil to be tested. Form I should be used for first testing and Form II for second testing.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: 80 cents per 100, each division, I, II, and III.

Clapp's School Tests in Upper Arithmetic. By Frank L. Clapp. Published: in "A Survey of the Public Schools of Idaho Springs, Colorado, 1918". Purpose: to measure pupil's ability to solve typical problems in arithmetic. Range: grades 7 and 8. Time to give: 25 minutes. Time to score: no information. No information as to standardization.

The test is composed of 25 typical problems or "it is believed such as should be solved by pupils in the upper grades". Out of print.

Clapp's Standard School Tests: The Number Combinations. By Frank L. Clapp and Bernard P. Hubner. Published: 1923. Purpose: to measure speed and accuracy in handling the number combinations. Range: grades 2 to 8 inclusive. Time to give: 3 to 15 minutes, depending upon grade. Time to score: 1 minute. Tentative standards. End of first 3 months of school. Standards for the end of six- and nine-months' periods to be determined.

There are 3 tests, as follows: (1) "A" in single form, (2) "B" in problems, (3) "C" in special diagnostic problems. Test A is for grades 2 to 8 inclusive. It is composed of 390 simple problems, 100 for each of the first 3 operations and 90 for division. Test B is for grades 4 to 8 inclusive. It differs from Test A only in the number of problems and degree of difficulty. Test C is composed of all types of problems in number combinations. Speed is determined by the time required to solve all problems. Accuracy is determined by the number of errors made while solving the problems. The tests may be used separately. One test of each used is needed for each pupil to be tested.

Publisher: Frank L. Clapp, University of Wisconsin, Madison, Wis.

Price: \$1.25 per 100, including directions and answer key.

Cleveland Survey Tests. By Cleveland Survey Staff. Published: 1916. Purpose: to measure ability in the four fundamentals, including fractions. Range: grades 3 to 8. Time to give: $\frac{1}{2}$ to 3 minutes for each set. Time to score: no information. Standardized: March or April standards.

The tests are composed of 15 sets, arranged spirally, in order of difficulty, on a folder. They are composed of 4 sets in addition, 2 in subtraction, 3 in multiplication, 4 in division, and 2 in fractions. For example, the addition problems range from one-place numbers with 2 addends to four-place numbers with several addends. The tests lend themselves to diagnostic purposes. One copy of the test series is needed for each pupil to be tested. Instructions and blanks for recording with standard scores are printed on a separate sheet. The examiner needs one test series and one class record sheet.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: \$1.90 per 100 copies. Sample sets including one test series and one class record sheet, 10 cents, postpaid.

Courtis Standard Research Test: Series A. Test No. 7. By S. A. Courtis. Published: 1908. Purpose: to measure speed and accuracy in handling the fundamentals with problems using the signs of operation. Range: upper elementary grades. Time to give: no information. Time to score: no information. Standardized: no information as to time standardized.

The test is composed of 16 problems involving the 4 fundamental operations in arithmetic. No other paper is to be used. The problems are written, using the sign to indicate the procedure. Keys are furnished for scoring. One test is needed for each pupil to be tested.

Publishers: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.

Price: 65 cents per envelope containing material for 40 pupils, including instructions.

Courtis Standard Research Tests: Series B. By S. A. Courtis. Published: 1914. Purpose: to measure the pupil's ability to handle the 4 fundamentals in arithmetic with proper speed and accuracy. Range: grades 3 to 8 inclusive. Time to give: 4 to 8 minutes each. Time to score: 20 minutes. Standardized: June standards.

The tests are composed of 4 forms, equivalent and interchangeable. Each form is made up of 4 tests, one in each of the fundamental operations in arithmetic. The addition test is used here as an example to show what the tests are intended to reveal: (1) the fundamental combinations, (2) the mechanism of column addition, (3) to carry, (4) to bridge the addition span, (5) to control the effect of fatigue, (6) to work at the proper speed, (7) accuracy. For each test one form is needed for each pupil to be tested. Instructions and norms are available.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.

Price: 75 cents per envelope of 40 tests, including instructions.

Courtis Standard Practice Tests in Arithmetic. By S. A. Courtis. Published: 1912; revised, 1920. Purpose: to determine the individual needs of the pupils and the degree and kind of drill to meet those needs. Range: grades 4 to 8. Time to give: no information. Time to score: no information. Standardized: no information as to time standardized. Used for drill purposes to bring children up to standard.

The tests are composed of 48 graded lessons on cards, in 2 forms, A and B, including 5 research tests and 8 cards for special study, covering arithmetical operation with whole numbers, in grades 4 to 8. The 1920 revision offers several new features for measuring and supervisory work. The practice tests are teaching devices as well as tests. The examiner needs one cabinet of adequate size, one teacher's manual, one teacher's record. Besides cabinet cards for the class, each pupil needs one copy of Student's Record and Practice Pad.

Publisher: World Book Co., Yonkers-on-Hudson, N.Y., also Kansas State Normal School, Emporia, Kan.

Prices: World Book Co.:

Cabinet I. 576 lesson cards with guides. For class of 48 pupils. \$8.50 net.

Cabinet II. 288 lesson cards with guides. For class of 24 pupils. \$6.50 net.

Cabinet III. 144 lesson cards. For a class of 12 pupils. \$2.25 net.

Students' Record and Practice Pad. 14 pages of record and 100 tissue sheets, 15 cents net.

Teacher's Manual. 64 pages. 30 cents net.

Teacher's Record. Pages 45-53 of Teacher's Manual. 5 cents net.

Research Tests. Envelope of 48 cards, consisting of 3 Research and 2 Supervisory Tests. Price 75 cents net.

Lesson Cards 1 to 48: Form A. 47 cards in an envelope. 75 cents net.

Lesson Cards 1 to 48: Form B. 47 cards in an envelope. 75 cents net.

Extra Lesson Cards. Package of 25 of any lesson card. 50 cents net.

Specimen Sets. Consists of 2 envelopes of Lesson Cards 1 to 48: Form A and B, \$1.

Students' Record and Practice Pad and 1 Teacher's Manual. \$1.50, postpaid.

Courtis Standard Research Tests: Series A. By S. A. Courtis. Published: 1908. Purpose: to measure pupil's ability to handle the 4 fundamentals. Standardized: no information.

There are 8 tests. The first 4 consist of problems to measure the pupil's ability to handle combinations from 0 to 9 in addition, subtraction, multiplication, and division. The fifth consists in copying figures (rate of motor ability). The seventh is described separately. The eighth consists of reasoning problems. Series A, except No. 7, has been largely replaced by Series B.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.

Price: \$4 per 1,000; answer cards, 2 cents each; record and supervision graph, 6 cents each.

Courtis' Supervisory Tests in Arithmetic, A and B. By S. A. Courtis. Published: 1918. Range: Test A, grades 4B, 4A, and 5B; Test B, grades 5A to 8A. Time required to give test: Test A, 3 to 6¼ minutes; Test B, 4½ to 9 minutes. Time to score: 30 minutes. Standardized: June scores.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.
Price: 32 cents for one complete copy with instructions for giving and score key.

General Test A, Form X. By Detroit Public Schools. Published: 1922. Purpose: to measure speed and accuracy in the 4 fundamentals of arithmetic. Range: grades 4B to 5B inclusive. Time to give: 6¼ to 5¼ minutes. Scoring made easy by use of an answer card. Detroit standards.

The test is composed of 6 problems in addition, 12 in subtraction, and 5 in division. No carrying is required. Speed is determined by the number of problems attempted in the time allowed. Accuracy is determined by the number solved correctly. The test is primarily a local one, but it may be used by systems that desire to compare their own achievements with those of Detroit. One test is needed for each pupil to be tested.

Publisher: Bureau of Educational Research, Detroit Public Schools, Detroit, Mich.

Price: no information.

General Test B, Form W. By Detroit Public Schools. Published: 1922. Purpose: to measure speed and accuracy in the 4 operations in arithmetic. Range: grades 5A to 8A inclusive. Time to give: 4½ to 6¾ minutes. Time to score: short. Detroit standards.

The test is composed of 8 problems in addition, 8 in subtraction, 5 in multiplication, and 4 in division. Speed is determined by the number of problems attempted in the time allowed, and accuracy is determined by the number of problems solved correctly. The test is primarily a local test, but it may be used by the systems that desire to compare their own achievements with those of Detroit. One test is needed for each pupil to be tested.

Publisher: Department of Educational Research, Detroit Public Schools, Detroit, Mich.

Price: no information.

Fassett's Standardized Number Tests. Published: no information. Range: grades 4 to 7 inclusive. Time to give: different times for different cards. Time to score: each child scores his own paper. Standardized: no information.

Publisher: Milton Bradley and Co., Springfield, Mass.

Price: 12 cents per package.

Guhin's Number Tests. By M. M. Guhin. Published: 1919. Purpose: to measure speed and accuracy in the fundamentals of arithmetic. Range: grades 3 to 8. Time to give: from 150 seconds for third grade to 100 seconds for eighth grade. Standardized.

The Guhin "Example Books" are composed of both exercises and tests. The tests involve more than ordinary tests as they constitute a part of Guhin's method of teaching number combinations. Both speed and accuracy are measured. The pupil marks the time on his paper when he finishes his work. One test is needed for each pupil to be tested.

Publisher: Hub City Supply Co., 20 Third Ave., S.E., Aberdeen, S.D.
Price: 40 cents per 100 net.

This is not considered test material.

Pittsburgh Arithmetic Scale: Forms A, B, C. By J. Freeman Guy. Published: 1921. Purpose: to measure pupil's ability in the fundamentals of arithmetic. Range: grades 3 to 8 inclusive. Time to give: 25 minutes; actual working time of pupils, 118 minutes. Time to score: no information. Standardized: end of semester.

The scale is composed of 3 forms, A, B, and C, all equal in difficulty. Each form consists of problems selected from the 4 fundamentals. "The rows of examples increase in difficulty." One test is needed for each pupil to be tested.

Publisher: Department of Research and Measurement, Board of Education, Pittsburgh, Pa.

Price: set of 30 tests, including directions and score key, grade, year, and age norms, 30 cents.

The Hollywood Arithmetic Test. By Division of Educational Research, Los Angeles, City School District. Published: 1918, in First Year-Book, Department of Educational Research, Los Angeles, Calif. Purpose: to measure rate and quality of work in arithmetic. Range: no information. Time to give: 30 minutes. Time to score: no information. Not standardized.

The test is composed of Forms 1, 2, and 3. Each form contains 19 problems. The problems range from simple problems in the 4 operations to reasoning problems in percentage. The problems are weighted. Scores for rate and quality are given. One test is needed for each pupil to be tested.

Publisher: Division of Educational Research, City Schools, Los Angeles, Calif.

Price: no information.

It has been ascertained that this was nothing more than a printed examination and all copies have been destroyed.

Hoover and Kelly Arithmetic Cards (practice exercises). Published: 1922. Range: third grade.

Publisher: W. H. Wheeler and Co., Chicago, Ill.

Price: 4 cents per card; one card for 2 pupils. A drill device, not a test.

Kansas State Normal School Research Tests in Arithmetic. Same as Courtis Standard Research Test in Arithmetic, Series B.

Number Fact Drill and Test Sheet. By Myrtle L. Kaufmann. Published: 1921. Purpose: teaching device. Range: grade 2. Time to give: 3 minutes. Time to score: short. Local standards: end of semester.

The test is composed of simple problems in addition and subtraction. The test is not published for general distribution.

Publisher: Myrtle L. Kaufmann, Logansport, Ind.

Stanford Achievement Test. By Truman L. Kelley, G. M. Ruch, and Lewis M. Terman. See Stanford Achievement Test under Miscellaneous.

Los Angeles Arithmetic Tests. This test is out of print and has not been used for several years. Since the publishers have no copies of it they cannot give us any information.

Lunceford's Diagnostic Number Tests. By A. E. Lunceford. Published: 1920. Purpose: to measure the ability of primary pupils to make simple combinations in addition. Range: primary grades. Time to give: 5 minutes. Time to score: 1 minute. Standardized: mid-year scores.

The test is composed of problems of simple combinations in addition. The tests are especially recommended for diagnostic purposes. "They have proved to be quite a valuable device for discovering peculiar number combinations." One test is needed for each pupil to be tested.

Publisher: Kansas State Normal School, Emporia, Kan.

Price: 75 cents per 100 copies. Sample sets, 6 cents, postpaid.

Manuel's Digit Combination. By Colorado State Normal School. Published: November, 1922. Purpose: to measure pupil's ability to do simple combinations in the 4 fundamentals. Range: grades 3 to 8. Time to give: 10 minutes for each part. Time to score: 1 to 5 minutes each part, according to extent of information wanted. Standardized: no. Norms are being made on basis of results in western Colorado. Tests given near mid-year.

The test is made up of combinations in the four fundamentals in arithmetic. "There are 100 combinations of digits in addition, subtraction, and multiplication, and 90 in division. This includes such similar combinations as 9 plus 6 and 6 plus 9, 32 divided by 8, and 32 divided by 4. Examples in which 0 would be a divisor are excluded." The screen covers the problem and is adjusted at regular periods so that the pupils can see the problems that they are to solve, for only a definitely limited time. Screens may be used for more than one class. One test is needed for each pupil to be tested. Directions for use are available.

Publishers: Colorado State Normal School, Gunnison, Colo.

Prices: test blanks (specify whether for addition, subtraction, multiplication, or division), (one for each pupil), 60 cents per 100. Screens (one for each pupil in largest class in each school), 60 cents per 100.

Maxson's Practical Self-Keyed Fundamental Number Work. Published: about 1910. Range: grades 2 to 9. Time to give: any assigned time. Time to score: no information. Standardized: no information.

This is not a test, but a thoro and comprehensive number drill system containing original features that make it practical, workable, and effective.

Publisher: J. L. Hammett and Co., Cambridge, Mass.

Price: 60 cents per set, including directions and score key.

Monroe's Standardized Reasoning Tests in Arithmetic. By W. S. Monroe. Published: 1918. Purpose: to measure ability to reason in arithmetic. Range: grades 4 to 8. Time to give: not more than 25 minutes. Time to score: no information. Standardized: time of year standards were made, April.

The tests are composed of 15 problems each: Test I, grades 4 and 5; Test II, grades 6 and 7; Test III, grade 8. Scoring is based on both right principle and correct answer. Right principle and correct answer are weighted in each problem. Right principle is usually regarded as of the most importance; however, they are sometimes regarded as having equal value. Speed can be measured, altho the tests are not primarily speed tests. One test is needed for each pupil to be tested. Directions for giving are printed on the tests. Norms and record sheets are available. Two forms of this test of equal difficulty are available: Form I and Form II.

Publishers: Public School Publishing Co., Bloomington, Ill.

Price: Test I, grades 4 and 5, 80 cents per 100; Test II, grades 6 and 7, 80 cents per 100; Test III, grade 8, 80 cents per 100.

Monroe's Diagnostic Tests in Arithmetic. By W. S. Monroe. Published: 1917. Purpose: diagnostic. Range: grades 4 to 8. Time required to give: varies with grades, from 30 seconds to 4 minutes, for each separate test. Standardized: April scores.

The tests are made up of 4 parts on separate folders, each part including from 4 to 6 tests. Part I, including Tests 1 to 6, is on "Operations with integers". Part II, Tests 7 to 11, is on "Operations with integers", but of greater difficulty than Part I. Part III, Tests 12 to 16, consists of "Operations with common fractions". Part IV, Tests 17 to 21, consists of "Multiplication and division of decimal fractions". One set of the 4 parts should be ordered for each pupil.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: 85 cents per 100 for each part.

Monroe's General Survey Scale in Arithmetic. By Walter S. Monroe. Published: 1920. Purpose: to measure pupil's ability to perform the operations of arithmetic. Range: Scale I, grades 3, 4, 5; Scale II, grades 6, 7, 8. Time to give: Scale I, 7 minutes; Scale II, 17½ minutes. Time to score: short. Standardized: January scores.

The general survey scale is composed of 2 separate scales as follows: Scale I for grades 3, 4, 5; Scale II for grades 6, 7, 8. Scale I is composed of 8 tests, 2 for each of the fundamental operations. All

the tests are to be given at one testing. Scale II is composed of 7 tests. All are to be given at one testing. One scale is needed for each pupil to be tested. Directions for giving and scoring are furnished.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: \$1 per 100. Sample sets, 15 cents. Directions and norms included.

Omaha Speed and Accuracy Test. Assistant Superintendent of Schools, Omaha, Neb., says that the only test of this kind that they ever had was a mimeographed sheet of arithmetic tests in the fundamentals similar to Courtis, Series B. They simply made up exercises like Courtis' and used them for practice, using the same standards as he used. Their practice tests are out of print now.

Progress Tests in Arithmetic. By Harriet E. Peet and Walter F. Dearborn. Published: 1920. Purpose: diagnostic and power test. Range: grades 4 to 8 inclusive. Time to give: grades 4 and 5, 55 minutes; grades 6, 7, or 8, 70 minutes for complete test. Time to score: short. Standardized: mid-year and June scores.

The tests are made up of 2 series: (1) grades 4 and 5, (2) grades 6, 7, and 8. Each series is composed of 5 tests, each test containing from 9 to 13 problems. Test 1 in each series is a reasoning test. Space is left under each problem for the solution. The problems are weighted. Values range from 4 to 16. One series of tests is needed for each pupil to be tested. Directions for giving are printed on the tests. Directions for giving, a key for scoring, and blank for recording, as well as median scores, are furnished on a separate folder.

Publishers: Houghton Mifflin Co., Boston, New York, or Chicago, Ill. Also, the Harvard Graduate School of Education, 18 Lawrence Hall, Cambridge, Mass.

Price: \$1.20 per package of 24 tests and a record card with directions.

Scale of Attainment, Number 1 (Spelling, Arithmetic, Reading). By L. W. Pressey. Published: 1920; revised, 1922. Purpose: to measure progress in reading, arithmetic, and spelling. Range: grade 2. Time to give: not more than 30 minutes for all tests. Time to score: about 1 blank per minute. Standardized: January scores, before promotion.

The scale is made up of 4 tests: 1 on spelling, 1 on arithmetic, and 2 on reading. The spelling test is composed of 24 words to be spelled by the pupil. Tests 2 and 4 are reading tests. Test 2 consists of 24 lines, made up of meaningless groups of letters, each line containing only one real word. The pupil is to draw a line around the word in each line. Word recognition is tested. Test 4 consists of 29 sentences, each containing a word that should not be there. The pupils are to draw lines around the word that should not be there. One scale containing the 4 tests is needed for each pupil to be tested.

Publisher: Department of Psychology, Indiana University, Bloomington, Ind.

Price: \$1.15 per 100, including all necessary instruction for giving and scoring.

Scale of Attainment No. 2 (American History, Arithmetical Reasoning, English Grammar, and Reading Vocabulary). By L. W. Pressey. See Scale of Attainment No. 2, listed under History.

Scale of Attainment No. 3. By L. W. Pressey. Published: 1921. Purpose: to measure "essential achievement" in the third grade. Range: grade 3. Time to give: 7 to 8 minutes each. Time to score: 2 minutes per blank. Standardized: April and May scores.

The scale is made up of 3 tests: (1) spelling, (2) reading, (3) arithmetic. The spelling test is composed of 24 mutilated sentences, each containing a blank for writing the missing word. The teacher reads the sentence and supplies the missing word. The pupil is directed to write the word in the place where it should be. Test 2 is a reading test composed of 7 paragraphs, with 4 questions on each paragraph. Each question has 4 answers written after it, one of which is correct. The pupil is to draw a line around the correct answer. Test 3 in arithmetic is composed of 28 problems. After each problem 4 answers are written, one of which is correct. The pupil is directed to draw a line around the correct answer. One scale is needed for each pupil to be measured. Complete directions for giving and recording are given on a separate sheet, norms on another sheet.

Publishers: Department of Psychology, Indiana University, Bloomington, Ind.

Price: 90 cents per 100, including instructions for giving and scoring.

Arithmetic Scale A. By Daniel Starch. Published: 1915. Purpose: to measure pupil's ability in arithmetic. Range: grades 3 to 8. Time to give: about 15 minutes. Time to score: about $\frac{1}{2}$ minute. Standardized: June scores.

The scale is made up of 12 steps, increasing in difficulty. Each step is weighted with values ranging from .4 to 15.1. "A pupil's score is the number of the highest score passed, minus any steps on which he may have failed." All the steps contain reasoning problems. One scale is needed for each pupil to be tested. Directions and standards are printed on a separate sheet.

Publisher: University Coöperative Co., 508 State St., Madison, Wis.

Price: 80 cents per 100. Direction sheet, including standard scores, 2 cents each.

Stone Reasoning Test. By Clifford W. Stone. Published: 1920. Purpose: to measure reasoning ability in arithmetic. Range: grades 5 to 8. Time to give: 15 minutes. Time to score: 5 minutes per pupil after acquaintance and some practice. Standardized: end-of-term scores.

The test is composed of 12 problems, arranged in order of difficulty. The problems involve skill in operation as well as in reasoning. "One equivalent test has been prepared." One copy of the original or the

equivalent test is needed for each pupil to be tested. The manual of instructions, class diagnostic sheets, and individual diagnostic sheets are available.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: 40 cents per 100. Manual of Directions, 65 cents. Class Diagnostic Sheet, 3 cents. Individual Diagnostic Sheet, \$1 per 100.

Studebaker Economy Practice Exercises in Arithmetic. By John W. Studebaker. Published: 1916. Purpose: measure and increase of pupil's ability in the fundamentals of arithmetic. Range: grades 4 to 8. Time to give: varies with grade, 4 to 7 minutes each. Time to score: 1 minute. Standardized: at the close of each semester.

The Studebaker Practice Exercises are primarily teaching devices. The exercises are printed on a card with holes beneath each exercise, large enough for the pupil to write his answer on a sheet of paper placed beneath the card. At the end of the time allotted, the pupil turns the card over so that the holes will come directly over his answers. The pupil can then easily check his own paper by comparison with the correct answer on the card just above. The pupil's score is written on a folder arranged for recording daily scores. One set of exercises is needed for each pupil.

Publisher: Scott, Foresman and Co., Chicago, Ill.

Price: Set B-1, for city schools, 50 exercises and 930 cards (50 pupil's folders, 1 Teacher's Manual, and 1 Teacher's Record Sheet are supplied free with each set), \$18. Studebaker Exercises assorted, per 100, \$2.50. Pupil's folders, per 100, \$2. Teacher's Record Sheets, per dozen, 50 cents. Teacher's Manual, each 25 cents. Index for set (50 cards), \$1.

Theisen-Woody's Parallel Tests. By W. W. Theisen. "The parallel tests were made to follow the Woody Tests, Series A, as a second test. The time for giving, scoring, range, etc., are therefore the same as for the Woody tests."

There are 4 tests: addition, subtraction, multiplication, and division, with the problems arranged in order of increasing difficulty. They are made up of problems in the 4 fundamentals (whole numbers and fractions), United States money, denominate numbers, and mixed numbers. They contain both the column and plus sign type of problems. One test of each form used is needed for each pupil to be tested.

Publishers: The Parker Co., Madison, Wis.

Price: 75 cents per 100 for each operation.

Thompson's Minimum Essentials in Arithmetic. By Thomas E. Thompson. Published: 1912. Purpose: to measure pupil's speed and accuracy in the fundamentals of arithmetic. Range: grades 1 to 8. Time to give: $1\frac{3}{4}$ to 6 minutes each. Time to score: short. Standardized: no information as to time of year standards were made.

The tests are made up of quick oral and written tests in the fundamentals of arithmetic. There are 11 oral tests and 11 written

tests. The latter give time for each grade for each test. The oral tests are for practice purposes in preparation for the written tests. The problems in the written tests are the same as those in the oral test except that they are rearranged. Valuable as a system of teaching as well as testing. One set of tests is needed for each pupil.

Publishers: Ginn and Co., 2301 Prairie Ave., Chicago, Ill.

Price: 44 cents per 100; \$1.60 for 500.

Thurstone's Arithmetic Tests. By Dr. L. L. Thurstone. Published: 1919. For information, see Thurstone's Vocational Guidance Tests, listed under heading "Vocational".

Washburne's Column Addition Test. By C. W. Washburne, Skokie School, Winnetka, Ill. Published: 1920. Purpose: no information. Range: grades 3 to 8. Time to give: 3 to 6 minutes. Time to score: 20 seconds. Standardized tentatively. No information as to time of year for which tentative standards were made.

Publisher: Horace Mann School, Winnetka, Ill.

Price: not published for general distribution.

These tests are of almost no value without corresponding practice material which is not yet published.

Witham's Standard Arithmetic Tests. By Ernest C. Witham. Published: 1922. Purpose: to determine pupil's ability in arithmetic. Range: grades 4 to 9. Time to give: 30 to 45 minutes. Time to score: 1 minute. Standardized: fall and spring scores.

There are 5 separate tests: (1) all the essentials of several tests in 1 test, (2) fractions, (3) decimals, (4) percentage, (5) denominate numbers. Each test is made up of from 18 to 28 problems. Space is left under each problem for the solution. One test is needed for each pupil to be tested. Standards and answers are available for the problems.

Publishers: J. L. Hammett Co., Newark, N.J., and Cambridge, Mass.

Price: sets of 50, \$1 per set, including directions.

Woody's Arithmetic Scales: Series A and B. By Clifford Woody. Published: 1916; revised, 1920. Purpose: to measure achievement of a group, class, or entire school system. Range: addition and subtraction scales, grades 2 to 8; multiplication and division scales, grades 3 to 8. Time to give: 20 minutes. Time to score: about 1 minute per copy. Standardized: October standards, but scheme provided for making standards comparable with any month.

The scales are composed of 2 series, A and B. Each series is made up of 4 scales, one for each of the 4 fundamentals. "The examples in each scale have been carefully graded and arranged in order of difficulty. Series A and Series B are similar in construction, but Series B contains only about half as many problems as Series A, and the problems are arranged at approximately equal intervals on the scale." Series B is especially useful when time is limited; Series A is more

valuable for diagnosis. One test of either series is needed for each pupil to be tested. The examiner needs one manual of directions, and one record sheet for each 50 pupils.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City, N.Y.

Price: 50 cents per 100 for each scale; Manual of Directions, 60 cents; one record sheet for each 50 pupils, 3 cents each; answer cards, 5 cents each.

Woody-McCall's Mixed Fundamentals. By Clifford Woody and William A. McCall. Published: 1916. Purpose: diagnostic (ability to handle fundamentals). Range: grades 3 to 8. Time to give: 20 minutes. Time to score: about 1 minute per copy. Standardized: October scores, but scheme given for making standards comparable with any month.

The tests are composed of 2 forms equivalent and interchangeable. They were formed by a special arrangement of the Woody Arithmetic Scales. One test is needed for each pupil. Directions and norms (June medians) are printed on a separate sheet.

Publishers: Bureau of Publications, Teachers College, Columbia University, New York City, N.Y.

Price: 60 cents per 100; \$5.50 per 1,000; one copy of directions is supplied with each class order. Sample set, 6 cents postpaid.

BIOLOGY

Grier's Range of Information: Tests in Biology. By N. M. Grier. Published: 1918. Purpose: to measure range of information. Range: no information. Time to give: no information. Time to score: no information. Standardized: no information as to time of standardization.

Grier's Range of Information Test in Biology is made up of 3 parts, as follows: (1) Physiology; (2) Zoölogy; (3) Botany. The physiology test consists of 100 words "selected from textbooks used in the grades in the following manner. A list was first prepared of all those words pertaining more directly to physiology discovered in the spellers and readers previously used by the pupils in their grade school work." A similar list was made of common words from articles in the daily newspapers. Each of the other tests was constructed in a similar way.

Publisher: N. M. Grier (at Hollins College, Hollins, Va. in 1919).

Price: no information.

Ruch-Cossmann Biology Test, Form B. By G. M. Ruch and Leo Cossmann. Published: 1922. Purpose: to measure ability in biology. Range: grade 10 or wherever biology is taught. Time to give: 45 minutes. Time to score: 4 to 6 minutes. Standardized: June scores.

The test is made up of 5 separate tests covering a broad range of work in biology. Most of the questions are followed by a series of

answers. The pupils are to indicate the word or words that make the best answer. Test 5 is on "Mendelian inheritance". One test is needed for each pupil to be tested.

Publishers: Bureau of Educational Research, University of Iowa, Iowa City, Iowa.

Price: no charge at present for preliminary forms.

BOTANY

Caldwell's Science Tests (Botany, Chemistry, Physics, Zoölogy). See heading General Science.

Grier's Range of Information: Tests in Physiology, Zoölogy, and Botany. By N. M. Grier. See description under Biology.

CHEMISTRY

Bell's Test in First-Year Chemistry. By J. Carleton Bell. Published: 1918. Purpose: informational. Range: first-year chemistry classes. Time to give: no "time limit". Time to score: 2 minutes per paper. Standardized: June scores.

The test is composed of 25 questions on first-year chemistry. The primary object of the study was to determine what high school pupils in Texas know about first-year chemistry. The questions were framed in such a way that most of the answers could be marked right or wrong. The test has not been published for general distribution.

Caldwell's Science Tests (Botany, Chemistry, Physics, and Zoölogy). See heading General Science.

New Type of High School Chemistry Tests for Instructional Purposes. By Earl R. Glenn and Louis E. Welton. Published: 1922. Purpose: for instruction (a teaching device). Range: first-year chemistry classes. Time to give: 15 to 40 minutes. Time to score: usually scored in class and can be scored in from 5 to 10 minutes. More time required for first 2 or 3 tests. In process of standardization.

There are 14 tests, as follows: (1) elements, compounds, and mixtures; (2) oxygen, its properties and uses; (3) hydrogen, its properties and uses; (4) the metric system; (5) measurement of gases; (6) transformation of matter and energy; (7) water and hydrogen peroxide; (8) the atomic theory; (9) formulas and equations; (10) the chemical symbols; (11) carbon, carbon monoxide, and carbon dioxide; (12) how atoms combine: valence; (13) nitrogen and the rare gases in the atmosphere; (14) chlorine and hydro-chloric acid. One set of tests is needed for each pupil to be tested.

Publisher: Earl R. Glenn and Louis E. Welton, 425 West One Hundred Twenty-third St., New York City, N.Y.

Price: no price yet determined. Tests have been distributed free of charge to coöperating high schools.

Jones' Union Science Tests in Chemistry. By Franklin T. Jones. Published: 1918. Purpose: for practice and comparison. Range: first-year chemistry. Time to give: 2 to 10 minutes per test. Time to score: 10 tests brief. Standardized: both yes and no, any time after the first week of school.

There are 10 separate tests, as follows: (C1) Names and symbols of selected elements; (C2) The selection of elements in groups; (C3) Oxides of the elements; (C4) Hydroxides of the elements; (C5) Salts of metals; (C6) Meaning of chemical symbols, formulas, equations; (C7) Valence; (C8) Chemical effect of heat; (C9) Chemical effect of various agents; (C10) Naming of acids and salts. Each test is composed of from 3 to 50 exercises. Directions for giving and scoring are available. One set of tests is needed for each pupil to be tested.

Publisher: The University Supply and Book Co., 10109 Wilbur Ave., Cleveland, Ohio.

Price: 10 tests, 15 cents per set.

Chemistry Scales A and B. By S. R. Powers. Published: 1922. Purpose: information test in general chemistry. Range: classes in general chemistry. Time to give: Scale A, 18 minutes; Scale B, 15 minutes. Time to score: short. Standardized: end-of-year scores.

The Powers' Chemistry Scales consist of 2 scales, A and B. Scale A, Form 1, is composed of 30 exercises or "tasks". This is a test of ability to do tasks in chemistry. The exercises are arranged in 3 groups with 10 exercises in each. An average value is given for each group. The first task is to write the molecular formula for potassium iodide. Scale B, Form 1, is made up of 60 statements on general chemistry. In each of the statements, there are 5 choices for the last word. Only one of them will make the statement correct. "In each sentence draw a line under the one of those words which makes the truest sentence."

One scale of each given is needed for each pupil to be tested.

Publisher: World Book Co., Yonkers-on-Hudson, N.Y.

Price: 2½ cents per copy.

Rivett's Time Limit Test in Chemistry. By B. J. Rivett. Published: no information. Purpose: to test pupil's ability in chemistry. Range: first-year chemistry. Time to give: 1½ to 6 minutes each. Time to score: no information. Standardized: no information.

There are 6 separate tests: (1) Form A, symbols of elements; (2) Form A, valence and formulas; (3) Form B, elements; (4) Form B, valence and formulas; (5) Form A, naming compounds; (6) Form A, writing formulas. Each test contains from 20 to 40 exercises. One test is needed for each pupil to be tested. Directions for giving and scoring are available.

Publisher: B. J. Rivett, Northwestern High School, Detroit, Mich.

Price: 75 cents per 100. One set of directions and score sheet is supplied with each 25 tests.

A Preliminary Test in Chemistry. By H. A. Webb. Published: 1919.

Purpose: to measure what pupils already know as a basis for the

study of chemistry. Range: beginning of first-year chemistry. Time to give: 30 minutes. Time to score: depends on scorer; one should be able to score about 1 paper a minute. Standardized: no.

The test is composed of questions on elements, mixtures, and compounds. A list of 50 well-known substances are given consisting of 9 elements, 32 mixtures, and 9 compounds. The pupils are asked to define each class of matter and arrange the 50 words under proper headings. The test has never been published for general use.

COMPOSITION

A Scale for Measuring the General Merit of English Composition in the Sixth Grade. By F. S. Breed and F. W. Frostic. Published: 1917. Purpose: to measure general merit of English composition. Range: grade 6. Time to give: 20 minutes. Time to score: no information. Standardized: no information as to time of year for which standards are made.

The scale is made up of 9 sample compositions arranged in order of value. The values range from .2 to 9.7. The teacher reads the first part of a story called "The Picnic". When the story breaks off, the pupils are to finish it. Composition is graded by comparing it with the samples on the scale. The value of the composition graded is the value of the sample in the scale that resembles it most. One scale is needed for each teacher or examiner. An 18-page pamphlet describing the scale and its derivation is available.

Publishers: F. S. Breed, University of Chicago, Chicago, Ill.

Price: 10 cents per copy, including an 18-page pamphlet describing the scale.

Briggs' English Form Test. By Thomas H. Briggs. Published: 1921. Purpose: to measure the pupil's knowledge of the common elements of English composition. Range: grades 7 to 9. Time to give: not "time limit" tests. Time to score: short. Standardized: no information as to time of year for which standards are made.

The test is composed of 2 parallel forms, Alpha and Beta. They are of equal difficulty and alike in plan and arrangement but are made up of different sentences. Each test consists of 20 sentences to be punctuated; all necessary capital letters and punctuation marks are to be inserted so that the sentence will be correct. One copy of the test is needed for each pupil to be tested. Directions for giving, correcting, and scoring are given in a reprint from Teachers College Record, January, 1921.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: 90 cents per 100 copies Alpha or Beta. Instructions for giving, correcting, and scoring, 15 cents. Reprint from Teachers College Record, January, 1921.

Courtis Standard Research Test in Composition. See Greene's Organization Tests below.

Greene's Organization Test: Series C, Form A. Same as Courtis Standard Research Test in Composition. By Harry A. Greene. Published: 1918. Purpose: to measure the pupil's ability to organize groups of words into complete sentences. Range: grades 3 to 12. Time to give: 5 minutes. Time to score: $\frac{1}{2}$ hour. Standardized: no information as to time of year for which standards were made.

The test is composed of groups of words to be arranged into sentences. Ten sentences have been broken up into 3 or more groups of words and disarranged so that they do not make sense. The groups are numbered 1, 2, 3, 4, etc. In order to save time the sentences are not rewritten but instead the numbers are to be written in a rectangle at the right of the sentence in the order in which they should appear. The sentences are weighted and values assigned to each according to its difficulty. One test is needed for each pupil to be tested. Answer key, score sheet, and norms are on back of each test sheet.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.

Price: 70 cents per envelope containing test material, directions, and record sheets for 40 pupils.

Harvard-Newton Composition Scales. By Frank W. Ballou. Published: September, 1914. Purpose: to measure the ability of pupils in 4 types of written composition. Range: grades 7 to 9. Time to give: a single composition can be judged by use of the scale in a few minutes. Time to score: short. Standardized: any time of the year.

There are 4 separate composition scales: narration, description, exposition, and argumentation. Each scale is composed of 6 specimen compositions ranging in values from 40 to 95. "For each specimen there is given a statement of the most significant merits and defects." The merits and defects of a pupil's composition are noted, and a comparison is made with the compositions in the scale that are above and below it. The value of the sample in the scale nearest in merit to the composition being graded is the value assigned to it. One scale of each type of composition is needed for each teacher or examiner.

Publishers: Harvard University Press, Cambridge, Mass. Bureau of Educational Measurements and Standards, Kansas State Normal School, Emporia, Kan.

Price: complete scale, 50 cents per copy.

Supplement I (Narration), 12 cents per copy.

Supplement II (Description), 12 cents per copy.

Supplement III (Exposition), 12 cents per copy.

Supplement IV (Argumentation), 12 cents per copy.

The Hillegas Scale for Measurement of English Composition by Young People. By Milo B. Hillegas. Published: Teachers College Record, 1912. Purpose: to measure the ability of young people in English Composition. Range: elementary school and high school. Time

to give: no information. Time to scale: no information. Standardized: no information as to time of year for which standards are made.

The scale is composed of 10 sample compositions ranging in value from 0 to 937. Papers are scored by comparison with the standard scale. One scale is needed for each teacher or examiner.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: 3 cents per copy.

Hudelson's English Composition Scale. By Earl Hudelson. Published: 1921. Purpose: to serve as an objective measure for grading English compositions. Range: grades 4 to 12. Time for giving: 20 minutes. Time for scoring: depends upon length of theme. Standardized: both June and January scores.

The scale is composed of 16 specimens ranging in value from 2.00 to 9.50. The values were given by 96 competent judges. Compositions are to be measured by comparing them with the specimen in the scale and the value given is the value of the specimen nearest the merit of the sample measured. Directions for grading, scoring, and recording scores together with norms are furnished. One scale is needed for each teacher or examiner.

Publisher: The World Book Co., Yonkers-on-Hudson, N.Y., or Bureau of Educational Measurements and Standards, Emporia, Kan.

Price: 56 cents for booklet containing scale and directions.

Hudelson's Maximal Composition Ability Scale. By Earl Hudelson. Published: 1923. Purpose: designed primarily "to classify pupils fairly in composition". Range: grade 1 thru university. Time to give: 20 minutes. Time to score: depends on length of theme. Standardized: no information as to time of year for which standards are made.

The scale is composed of 18 themes written on the subject "How I Learned a Lesson". The specimens are arranged in order of value, ranging from 0.0 to 9.0. This scale "should be used at the beginning of the term for grouping pupils advantageously". One scale is needed for each examiner or teacher.

Publisher: World Book Co., Yonkers-on-Hudson, N.Y.

Price: no information.

Hudelson's Typical Composition Ability Scale. By Earl Hudelson. Published: 1923. Purpose: designed primarily to grade pupils justly within their own group. Range: grade 1 thru university. Time to give: 20 minutes. Time to score: depends on length of theme. Standardized: January scores.

The scale is composed of 18 themes written on the subject "A Snowball Fight on Slatter's Hill". The specimens are arranged in order of value, ranging from 0.0 to 9.0. This scale "should be used, say, at the close of school when the teacher needs to grade a pupil

reliably upon his effort". One scale is needed for each teacher or examiner.

Publishers: World Book Co., Yonkers-on-Hudson, N.Y.

Price: published as Part I of the Twenty-second Year-Book of the National Society for the Study of Education.

Lewis' Scale for Measuring Special Types of English Composition. Published: 1922. Purpose: to measure ability in letter writing as well as narrative composition. Range: grades 4 to 12. Time to give: 20 to 30 minutes. Time to score: varies; usually takes from 2 to 3 minutes. In process of standardization.

The scale is published in a small book which contains a discussion of the values and limitations of well known compositions and includes 5 new scales. Each of the new scales that has been added was derived for the purpose of measuring a particular form of written English. "Two are business letters, one composed of order letters, and the other of letters of application; two are for the measurement of friendly letters of two different types; the fifth scale is composed of narrative compositions." The scale is not published separately from the book.

Publisher: The World Book Co., Yonkers-on-Hudson, N.Y.

Price: \$1.36, postpaid.

Minnesota English Composition Scale. By M. E. Haggerty, University of Minnesota, Minneapolis, Minn. Out of print; no information obtainable.

Diagnostic Test in English Composition. By S. L. Pressey. Published: revised in 1923. Purpose: diagnostic. Range: grades 7 to 12 and college. Time to give: 6 to 15 minutes. Time to score: 1 minute, each test. Standardized: final standards to be for September and May.

The test is composed of 3 parts as follows: vocabulary, grammar, and punctuation. One test is needed for each pupil to be tested.

Publisher: Psychology Department, Indiana University, Bloomington, Ind.

Price: 35 cents per 100, including directions for giving and scoring.

Diagnostic Tests in English Composition: (a) Capitalization. By S. L. Pressey and Mrs. E. V. Bowers. Published: 1923. Purpose: diagnostic. Range: grades 7 to 12 and college. Time to give: 5 minutes. Time to score: 1 minute. Standardized: tentative standards; January scores.

The test consists of 28 sentences "correct in every way except that they lack all capitalization—aside from the capitals at the beginning of each sentence". The pupils are to draw a line under each letter that should be a capital. One test is needed for each pupil to be tested.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: 6 cents, including directions for giving and scoring.

Diagnostic Tests in English Composition: (b) Punctuation. By S. L. Pressey and Helen Ruhlen. Published: 1923. Purpose: diagnostic. Range: grades 7 to 12 and college. Time to give: 10 minutes. Time to score: 1 minute. Standardized: tentative standards; January scores.

The test is made up of 30 sentences to be punctuated. The pupils are to supply all punctuation marks that are not given, and to make any corrections that should be made. One test is needed for each pupil to be tested.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: 6 cents each, including directions for giving and score key.

Diagnostic Tests in English Composition: (c) Inflected Forms. By F. R. Conkling and S. L. Pressey. Published: 1923. Purpose: diagnostic. Range: no information given. Time to give: no information given. Time to score: no information given. Standardized: no information in regard to standardization.

The test is composed of 30 exercises. Each exercise is made up of 4 sentences, one of which is incorrect. The pupils are to put a cross before the incorrect sentences. One test is needed for each pupil to be tested.

Publishers: Department of Psychology, Ohio State University, Columbus, Ohio.

Price: no information given.

A Scale for the Measurement of English Composition. Providence (R.I.) Public Schools. Published: 1917. Range: grades 5, 6, 7, and 8. Standardized: mid-year standards. This test is not for general distribution.

Publisher: Department of Public Schools, 9 Exchange Terrace, Providence, R.I.

Rice's Composition Scale. By J. M. Rice. Published: 1903. Purpose: diagnostic. Range: no information. Time to give: no information. Time to score: no information. Temporary standards were made.

The scale was constructed from 8,300 themes written by pupils in various schools. "The themes were graded by placing them in five piles, known as Excellent, Good, Fair, Poor, and Failure. From this distribution, class averages were computed and samples of the reproduced story selected as guides to further scoring." The scale was not published for distribution.

Measurement of Eighth-Grade Composition. By William E. Stark, Superintendent of Schools, Hackensack, N.J. Published: 1915. Purpose: "to obtain a general estimate of the ability in composition of the pupils in the eighth grade of a public school system; and, secondly, to compare the quality of eighth-grade compositions written under the same conditions at an interval of three years". Range:

eighth grade. Time to give: no information. Time to score: no information. Standardization: no information.

The scale was arranged from compositions written in 1911 and in 1914. It was never perfected and put on the market as a measuring scale.

Publisher: no information.

Price: no information.

The Thorndike Extension of the Hillegas Scale. By E. L. Thorndike. Published: 1915. Purpose: to measure the general merit of compositions. Range: all grades. Time to give: no information. Time to score: no information. Standardized: no information as to time of year for which standards are made.

The scale is composed of 29 compositions arranged in 14 values. Seven of the compositions are taken from the original Hillegas Scale. The scale furnishes a variety of types of themes. Compositions are graded by comparing them with the specimen in the scale. The pupil's grade is the value of the specimen in the scale nearest in merit to the composition measured. One scale is needed for each teacher or examiner. Directions for using as well as standards are printed on the scale.

Publishers: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: 12 cents.

Thorndike's Preliminary Extension of the Hillegas Scale for the Measurement of Quality in English Composition by Young People. By E. L. Thorndike. Published: no information. Purpose: to measure general merit in composition. Range: no information. Time to give: no information. Time to score: no information. No information as to standardization.

The scale is composed of 15 compositions arranged in order of value. The values range from 0 to 95. The pupils' compositions are measured by comparing them with the specimens in the scale.

Publishers: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: no information.

Thorndike's English Composition. Published: 1916.

"This is not a test. It is a monograph containing 150 compositions whose general merit has been determined by a consensus of from 23 to over 100 judges. The series is useful for practice in judging English compositions." These specimens are arranged for use in psychological and educational experiments.

Publishers: Teachers College, Columbia University, New York City.

A Scale for English Composition. By Charles F. Towne. Published: 1918. Purpose: objective standard for grading composition. Range: grades 4 to 8 inclusive. Time to give: no information. Time to score: no information. Standardized: no information.

There are 5 separate scales. Each scale contains 5 samples suited to the particular grade for which the scale was constructed. The samples

were arranged by the city teachers of Providence, R.I. The scales were constructed for use in the Providence schools.

Publisher: Charles F. Towne, Boston, Mass.

Price: no information.

Nassau County Supplement to the Hillegas Scale. By M. R. Trabue.

Published: 1916. Purpose: to measure objectively general merit in English composition. Range: grades 4 to 12. Standardized: no information as to time of year for which standards were made.

The scale is composed of 10 specimens ranging in value from 0 to 9.0. "Each of the compositions tends to be of the same general narrative type." The composition to be graded is compared with the specimen in the scale and the value assigned to it that is given to the specimen nearest it in merit. One scale is needed for each teacher or examiner.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: 10 cents per copy. Discounts on quantity orders.

Willing Scale for Measuring Written Composition. By W. H. Willing.

Published: 1920. Purpose: to measure "story value" and "form value". Range: grades 4 to 9. Time to give: 25 minutes for writing and correcting paper. Time to score: 5 minutes. Standardized: end-of-year standards.

The scale is composed of 8 compositions ranging in value from 20 to 90. In rating the compositions two qualities were recognized, "story value" and "form value". The "story value" means the completeness with which the story is told. "Form value" is determined by the number of mistakes in spelling, etc., per 100 words. The pupil's grade is the value of the specimen in the scale nearest in merit the composition measured. One scale is needed for each examiner or teacher. Directions for using as well as tentative standards are printed on the scale.

Publishers: Public School Publishing Co., Bloomington, Ill.

Price: 9 cents per copy; 3 or more copies, 6 cents each.

Topeka 1914 Scale for Judging Merit in Composition. By Miss C. S.

Wolfe. Not for general distribution and not a test. Published: 1914. Purpose: to determine merit in composition. Range: elementary and secondary schools. Standardized: no information as to time of year for which standards are made.

The scale is composed of 20 specimens ranging in value from 1 to 20. Papers are graded by comparing them with the scale. If a pupil's composition work falls below Specimen 8, he is declared unprepared for promotion to the freshman class in high school. One scale is needed by each teacher or examiner. Directions for use are printed in the booklet containing the scale.

Publisher: A. J. Stout, Superintendent of Schools, Topeka, Kan.

Price: 40 cents for pamphlet containing 1914 and 1920 scales.

The Topeka 1920 Scale for Judging Technical Achievement. By Miss C. S. Wolfe. Published: 1920. Purpose: to measure technical ability in composition. Range: elementary and secondary schools. Time to give: no information. Time to score: no information. Standardized: no information as to time of year for which standards are made.

The scale was developed for the purpose of setting standards of work to be accomplished in each grade. Sample specimens of pupils' work are used to illustrate the use of the scale. A convenient scale, containing a summary of the requirements for each term, has been made which may be posted in the schoolroom as a means of familiarizing the teacher and pupils with the work for which each grade is responsible. One scale is needed for each teacher or examiner. Directions for use are printed in the booklet containing the scale.

Publisher: A. J. Stout, Superintendent of Schools, Topeka, Kan.
Price: 40 cents each. The pamphlet contains 1914 scales.

DRAWING

Manuel's Drawing Scale. By H. V. Manuel, Director of Educational Research, Colorado State Normal, Gunnison, Colo. This test has never been prepared for general distribution.

Grading Chart for Mechanical Drawing. By P. M. Spink. Published: 1921. Purpose: to measure ability in mechanical drawing. Range: elementary and high school. Time to give: no information. Time to score: no information. Standardized: no information.

The chart is made up of 6 plates, with values ranging from 45 to 95. "The idea of this chart is to give samples of Lettering, Numerals, Lines, Corners, Irregular Curves, Circles, Tangents, Arrows, etc., which show a difference of about ten points, but in no way to suggest a lesson plate." The standards for the high school are given at the top of the chart, and those for the elementary school are given at the bottom. "In grading a plate each part must be taken separately, sliding it along until work of the same or nearly the same quality is matched, the average of these different grades is the final grade." One chart is needed for each teacher or class.

Publisher: P. M. Spink, Faribault, Minn.

Price: single copies postpaid, 75 cents. Three copies, \$2. One-half dozen, \$3.50. In lots of one dozen or more, \$6 per dozen.

Thorndike's Scale for the Merit of Drawings by Pupils 8 to 15 Years of Age. By E. L. Thorndike. Published: Teachers College Record, 1913. Purpose: to measure ability in drawing. Range: 8 to 15 years of age. Time to give: no information. Time to score: no information. Standardized.

The scale is made up of 14 specimens, each weighted and given a value. The values, determined by over 400 competent judges, range

from 0 to 17.0. The pupil's drawings are measured by comparing them with the samples in the scale. The value given the drawing to be graded is the value of the specimen in the scale most nearly matching the sample. Pupils may grade their own drawings. At least one scale is needed for each teacher or class.

Publishers: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: new edition in preparation.

Whitford Art Test. By W. G. Whitford. Published: no information.

Purpose: to measure pupil's ability to appreciate art and "to draw or describe things graphically". Time to give: less than 15 minutes for Test 1; 30 minutes for Test 2. Time to score: short. Standardized: no information.

The test consists of 2 parts, as follows: Test No. 1, art appreciation; Test No. 2, drawing test. Test No. 1 deals with ability to appreciate art quality wherever found (in chair, rug, dress, painting, etc.). It contains 14 definite problem-solving reactions. For example, refinement of curves, refinement in line and form, color, sense, etc. Test No. 2 is similar to the usual examination in elementary freehand drawing.

Publishers: Prang Co., Chicago, Ill.

Price: no information.

FRENCH

Silent Reading Test B: French. By C. H. Handschin. Copyrighted: 1919. Purpose: to measure ability to read connected discourse in French. Range: first and second years of high school French. Time to give: less than 10 minutes. Time to score: short. Standardized: no information as to time standards were made.

The test is composed of 2 paragraphs of connected French with a total of 192 words. The pupil is given one minute in which to read the selection. At the end of the time he is asked to turn his paper over and answer in French or English 10 questions on the selection. One test is needed for each pupil to be tested. Directions for giving are printed on the tests. Standards and record sheets are available.

Publisher: World Book Co., Yonkers-on-Hudson, N.Y.

Price: material for 50 people, including directions, key, record sheets, etc., \$1.

Handschin's Silent Reading Test A: French. By C. H. Handschin. Copyrighted: 1919. Purpose: to measure ability of pupils in elementary French. Range: first and second years of high school or university. Time to give: 5 minutes. Time to score: 1 minute or less. Standardized: end of first and second semesters.

The test is composed of 12 exercises. Each contains a statement followed by a question. The pupil's answer is to be given in French. The sentences are arranged in order of difficulty. One test is needed for

each pupil to be tested. Instructions for giving, a key for scoring as well as norms, are available.

Publisher: World Book Co., Yonkers-on-Hudson, N.Y.

Price: material for 50 people, including directions, key, record sheets, and norms, \$1.

Comprehension and Grammar Test A: French. By C. H. Handschin. Copyrighted: 1919. Purpose: diagnostic of difficulties in French grammar. Range: first-year classes in high school French. Time to give: 10 minutes. Time to score: 1 minute. Standardized: no information as to time of year standards were made.

The test is made up of 6 easy French sentences. Each sentence has a blank to be filled by the pupil. Five minutes are given in which to study the sentences and fill the blanks, then the pupil is to turn the paper over and reproduce the sentences in French as he remembers them. After the pupil has reproduced the sentences, he is to rewrite them on the same sheet, changing person, number, and time. Time for writing both versions is 10 minutes. One test is needed for each pupil to be tested. Instructions, a key for scoring, and record sheets are available.

Publisher: World Book Co., Yonkers-on-Hudson, N.Y.

Price: material for 50 people, including directions, key, and record sheets, \$1.

Henmon's French Tests. By V. A. C. Henmon. Published: 1921. Purpose: to measure pupil's ability to reproduce sentences, including vocabulary and grammatical principles studied. Range: after at least one year of French has been studied. Time to give: 8 minutes for vocabulary and 12 minutes for sentence. Time to score: 4 to 5 minutes. Standardized: June standards.

The tests are made up of 2 parts: (1) The French Vocabulary Tests A and B, (2) French Sentence Tests I and II. In the vocabulary tests a space is left at the right of each word for its English meaning. Each word is weighted, and its value written at the left of the word. The sentence tests are composed of 12 sentences each. Space is left after each for the pupil to write its English equivalent. The sentences are weighted and the value written at the left of each. Standard scores for 3 years of work as well as instructions are available. One test is needed for each pupil to be tested.

Publisher: World Book Co., Yonkers-on-Hudson, N.Y.

Price: each test per package containing 25 tests, including instructions for giving and scoring (with standard scores) and one record sheet, 50 cents net.

Starch's French Reading and Vocabulary Tests. By Daniel Starch. Published: 1916. Purpose: to measure ability in French. Range: four years. Time to give: no information. Time to score: no information. Tentative standards.

The reading test is composed of 30 sentences arranged in order of increasing difficulty. The sentences were selected by taking sentences

at regular intervals from the class texts and reading material. The vocabulary test is composed of 2 sets of 100 words each, selected from Spirs and Sarenner's large French dictionary. The words were selected by using words that occur at regular intervals thru the entire vocabulary. The pupils were to write the English derivative. The test is out of print.

GEOGRAPHY

Boston Research Tests in Geography. By Harriett M. Barthelmess. Published: 1919. Purpose: to measure ability in geography. Range: grades 4 to 8. Time to give: no information. Time to score: no information. No information as to standardization.

The test is made up of 10 exercises. The test was given as an examination in Boston in 1919. It is not different from other ordinary examinations. The Department of Investigation and Measurement is able to give the per cent of pupils in the eighth grade of the Boston public schools that passed on each question.

Publisher: Department of Education, Investigation and Measurement, Public Schools, Boston, Mass.

Buckingham-Stevenson Information Test in United States Geography.

By B. R. Buckingham. Published: April 1, 1923. Purpose: information-problems. Range: grades 6 to 9. Time to give: 14 minutes of actual working time. Time to score: short. Standardized: end-of-year scores.

There are 2 tests, as follows: Part I, Information Test; Part II, Problems. Part I is made up of 50 questions. Each question is followed by 4 answers, one of which is correct. The pupils are to select the answer they believe to be correct. Part II is made up of 25 problems or questions. Each question is followed by 4 answers or statements, one of which is correct. The pupils are to select the statement they believe to be correct. One test is needed for each pupil to be tested.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: \$2.50 per 100 copies. Sample set, 10 cents.

Buckingham-Stevenson Place Geography Tests. By B. R. Buckingham and P. R. Stevenson. Published: 1922. Purpose: to measure pupil's ability to locate places. Range: grades 4 to 8 inclusive. Time to give: not "time limit" tests. Time to score: short. Standardized: November scores.

The tests are made up of 2 parts of 3 forms each, as follows: The World, and the United States. "This series of tests is composed of three forms of approximately the same difficulty. Only one form should be administered at one time. When giving test, use the items in the first column for Form 1, those in the second column for Form 2, and those in the third column for Form 3." The World Test consists of 3 forms of 80 questions each. The examiner reads the question and its number. The pupil writes the number and the answer. Each

question can be answered by one word or name. The United States Test is similar to the World Test in construction and arrangement. One series of tests is needed for each pupil to be tested.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: 5 cents per copy, \$4 per 100; class record sheets, 1 cent each.

Courtis Supervisory Test in Geography: Test A, Form A. By S. A. Courtis. Published: 1918. Purpose: to measure pupil's ability in location tests. Range: Test A, grades 5B to 6A; Test B, grades 4A to 7A. Time to give: states, 4 minutes; cities, 2 minutes; oceans and continents, 1 minute. Time to score: 30 minutes. Standardized: beginning and end of each semester.

There are 2 location tests. The first part of the test consists in locating the 48 states. The test contains an outline map of all the states of the United States with a key number in each state. The names of the states are written in column form with a blank beside each in which to write the key number of the state. The second part consists in locating cities and is similar to Part 1 in arrangement. One test is needed for each pupil to be tested. Directions for giving, score cards, record cards, and standards are available.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.

Price: Complete sets (2 forms), \$1.50 per package, containing test material for 40. Renewals (2 forms), \$1 for package containing test material for 40.

Cram Geography Test. Fred D. Cram.

Publisher: Extension Division, Iowa State Teachers College, Cedar Falls, Iowa.

Price: no longer available for general distribution.

Standard Tests in Geography. By Detroit Public Schools. Published: 1918. Purpose: location test. Range: grades 4 to 7. Time to give: 3 to 4 minutes. Time to score: 5 minutes. Standardized: September, January, February, and June scores.

There are 4 location tests, as follows: (1) Form E, Location of continents and oceans; (2) Form H, States and cities of the United States; (3) Form K, Important countries and cities of the world exclusive of the United States; (4) Form B, Important countries and cities of Europe. Each test consists of an outline map of the country or countries to be studied. The divisions are numbered. The names of the countries or cities are written in column form just below the map. The pupils are to write the number of the country or city before its name. One test is needed for each pupil to be tested.

Publisher: Detroit Public Schools, Detroit, Mich.

Price: no information.

Standard Tests in Geography. By Detroit Public Schools. Published: 1922. Purpose: to measure pupil's ability to locate places of importance. Range: grades 4B to 9A inclusive. Time to give: 1 to 4

minutes. Time to score: short. Detroit standards: February and May scores.

The tests are composed of 3 forms, as follows: Form B, Countries of Europe; Form H, States and cities of the United States; Form K, Countries and cities of the world. Form H contains an outline map of the United States with a number written in each state. Just under the map the names of the states are written. The pupils are to locate a state by writing its number after its name. The other tests are similar to Form H in arrangement. The tests are primarily for local use; they may be used, however, by any system that desires to compare their own standards with those of Detroit. One test of each used is needed for each pupil to be tested.

Publisher: Bureau of Educational Research, Detroit Public Schools, Detroit, Mich.

Price: no information.

Gregory and Spencer's Geography Test. By C. A. Gregory and Peter L. Spencer. Published: March, 1922. Purpose: to measure pupil's comprehension of the subject of geography. Range: grades 6 to 9. Time to give: 45 minutes. Time to score: 2 minutes. Standardized: May standards.

The test is made up of 3 forms: A, B, and C. Form A is described here. It is composed of 8 parts, as follows: (1) Trade routes and their products; (2) Miscellaneous geography; (3) Causal geography (United States); (4) Causal geography (world); (5) and (6) Place and directions; (7) and (8) Political, land, and place geography. A cross is to be made by the pupil before the correct answers to the questions. One test is needed for each pupil to be tested. Directions, a key and score sheets are available.

Publisher: Bureau of Educational Research, University of Oregon, Eugene, Ore.

Price: \$4 per 100, including key, directions, and record sheets and cards.

Hahn-Lackey Geography Scale. By H. H. Hahn and E. E. Lackey. Published: 1918, revised, 1922. Purpose: diagnostic and achievement test. Range: grades 4 to 8 inclusive. Time to give: depends on the number of exercises used for a test. Each teacher makes her own test from the scale. Time to score: about the same time required as for an ordinary school test.

The scale is composed of 224 exercises arranged in 23 columns as steps. The exercises in each step are of approximately equal difficulty. At the top of each step, the standard for each grade is written. The scale is so arranged that from 15 to 29 tests can be given each grade without the repetition of exercises. Directions for using the scale are printed on it. One scale is needed for each teacher or examiner.

Publisher: H. H. Hahn, State Normal School, Wayne, Neb.

Price: for orders in lots up to 100, 16 cents each, including score key. For lots over 100, 12 cents each. Single copies of score key, 5 cents each. Scale only in lots of 100 or more, 8 cents each, plus postage.

Iowa State Teachers' College Geography Test, Parts I and II. Published: mimeographed for local use, 1921. Range: suitable for grades 4 and 5. Time to give: not standardized. Time to score: 2 to 5 minutes.

Publishers: Iowa State Teachers' College, Cedar Falls, Iowa. Not available for general distribution.

Boston Research True-False Test in Geography. By Arthur W. Kallom. Published: 1922. Purpose: to measure ability in geography. Range: grade 8. Time to give: 20 minutes. Time to score: no information. Not standardized.

The test is composed of 40 sentences. "Some of them are true and some are false. If the sentence is true, underline the word 'true'. If the sentence is false, underline the word 'false'." The tests are not published for sale.

Los Angeles Geography Test, A6 and A8. By Division of Educational Research, Public Schools, Los Angeles, Calif. Published: 1918. Purpose: to measure ability in geography. Range: grades A6 and A8 (second semester). Time to give: no information. Time to score: no information. Standardized: local standards, end-of-the-second-semester standards.

There are separate tests for each grade. Each test is divided into 3 parts, as follows: (1) Location, (2) Physical features and industries, (3) Problems. A8 differs from A6 only in degree of complexity. The tests are not published for general distribution.

Publishers: Division of Educational Research, Public Schools, Los Angeles, Calif.

Price: not published for general distribution.

Map Test of Canada. By G. W. McGill. Published: June, 1922. Range: grades 6 to 8 inclusive. Time required to give: 30 minutes. Time to score: no information. Standardized tentatively: June scores.

The test is composed of an outline map of Canada with questions on the important straits, gulfs, bays, lakes, islands, rivers, political divisions, and miscellaneous information. Abbreviations are used to indicate the different parts of the map as, P for province, L for lake, etc. Each division of the map is numbered. In answering the questions the pupils are to write after the abbreviation the number of the province, lake, etc. One test is needed for each pupil to be tested.

Publisher: University of Toronto Press, Toronto, Canada.

Price: one complete copy with directions and score key, 6 cents.

New York Standard Geography Tests: Series A. By Eugene A. Nifen-ecker. Published: 1922. Purpose: to measure ability in geography. Range: no information. Time to give: 12 to 15 minutes for each test. Time to score: short. Standardized: no information.

There are 8 separate tests, as follows: (1) Physical, (2) Drainage, (3) Mathematical, (4) Climate, (5) Industrial, (6) Industrial, (7) Com-

mercial, (8) Location of cities. Each test is made up of 20 questions. One set of tests is needed for each pupil to be tested.

Publishers: Bureau of Reference, Research, and Statistics, Board of Education, 500 Park Ave., New York City.

Price: no information.

Nifenecker's Pupils' Progress thru the Grades. Not a test.

Olmsted's Diagnostic Geography Test. By M. C. Olmsted. Published: 1922. Purpose: diagnostic. Time to give: $2\frac{1}{2}$ to 9 minutes each; 30 minutes for complete test. Time to score: short. Range: 7 and 8 grades. Standardized: May and December standards.

There are 7 separate tests, containing from 10 to 30 questions each. The tests are as follows: Test 1, General geography; Test 2, Occupations; Test 3, Products; Test 4, Commerce; Test 5, Location; Test 6, Land and people; Test 7, Surface and drainage. The pupil is to underline a word that will make a sentence complete, or he is to write in the parenthesis, after the name of the country, a word that answers a question about that country. One test is needed for each pupil to be tested. Instructions are printed on each test. Record sheets as well as a key for scoring are available.

Publisher: M. C. Olmsted, Junior High School, Clarkston, Wash.

Price: \$1.50 per 100.

Boston Geography Test: United States and Europe. By Leonard O. Packard. Published: 1915. Purpose: to measure ability in geography. Range: no information. Time to give: no information. Time to score: no information. Standardized: no information.

There are 2 separate tests: The United States, Europe. The test on the United States consists of an outline map and 10 questions. The questions are made up of causal and location questions. The Europe test is similar to the one on the United States. One test is needed for each pupil to be tested. The tests are not available for general use.

Posey-Van Wagenen Geography Scales, Divisions I and II. By M. J. Van Wagenen. Published: 1922. Purpose: to measure pupil's ability in geography. Range: grades 5 to 8 inclusive. (Division I, grades 5, 6; II, grades 7, 8.) Time to give: 40 minutes. Time to score: 2 minutes. Standardized: end-of-grade or school year.

There are 2 separate scales: Information Scale, R, and Thought Scale, S. Scale R, Information, is composed of 30 exercises arranged in 3 groups of 10 each. Each exercise is weighted and an average value given to each group. Each exercise presents a choice between 2 or more answers. Scale S, Thought, is similar in construction and arrangement to the scale given above. The questions are constructed to necessitate a greater degree of reasoning than is needed in Scale R, Information. One scale of each used is needed for each pupil to be tested. A key for grading and blanks for recording are available.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: \$1.50 per 100, each division. Sample set, 20 cents.

Completion Test for the Measurement of Minimum Geography Knowledge of Elementary School Children. By W. C. Reaves and M. E. Branom. Published: 1917. Purpose: to measure information and reasoning in geography. Range: grade 7. Time to give: 38 minutes of working time. Time to score: no information. Standardized: no information.

This test is divided into 3 parts. Parts 1 and 2 consist of outline maps of the world. On the first the continents and oceans are to be located. Part 3 is composed of 20 exercises. Part of them are informational and part are reasoning questions. One test is needed for each pupil to be tested.

Publishers: W. C. Reaves and M. E. Branom, Harris Teachers College, St. Louis, Mo.

Price: no information.

Starch's Geography Test, Series A. By Daniel Starch. Published: no information. Purpose: to measure pupil's knowledge of geography. Range: grades 5 to 8. Time to give: not "time limit" test. Time to score: no information. Standardized: June scores.

The test is composed of 78 exercises, made up of mutilated statements. When the blank spaces are properly filled the statements will be correct. One test is needed for each pupil to be tested. Standards and directions for giving are printed on the tests.

Publisher: University Coöperative Co., 508 State St., Madison, Wis.

Price: 2 cents per sheet.

Thompson's Minimum Essentials in Geography. By Thomas E. Thompson. Published: 1914. Purpose: teaching aids and practice exercises. Range: grades 5 to 8. Time to give: no information. Time to score: no information. Standardized: no information in regard to time of year for which standards were made.

The tests are made up of 22 separate tests on different countries of the world. Each test contains 100 questions. Tests with odd numbers are oral tests to be used in drilling pupils after the facts concerning a country have been carefully taught. The tests with even numbers are written tests containing the same questions as the oral tests, differently arranged. Speed and accuracy are emphasized. Directions for giving as well as standards are printed on the tests. One test is needed for each pupil tested.

Publisher: Ginn and Co., 2301 Prairie Ave., Chicago, Ill.

Price: 44 cents per 100. \$1.60 for 500.

Witham's Standardized Geography Tests. By Ernest C. Witham. Published: 1916-20. Purpose: diagnostic and power test. Range: fourth grade to high school. Time to give: 20 to 30 minutes. Time to score: 1½ to 4 minutes. Standardized: spring standards.

There are 8 separate tests: (1) World, (2) United States, (3) South America, (4) Europe, (5) Asia, (6) Africa, (7) North America, (8) Commercial geography tests for junior and senior high schools. The World Test is made up of 7 parts: names, countries; form and motions of the earth; hemispheres; land and water forms; races, homes; indus-

tries, countries; large cities, location. The tests on the different countries are similar in construction and arrangement. The United States Test is made up of 9 parts. Such items as map drawing, location of capitals, bays, gulfs, rivers, mountains, industrial regions, etc., are considered. One test is needed for each pupil to be tested.

Publisher: J. L. Hammett Co., Newark, N.J., and Cambridge, Mass.

Price: sets of 50 of each test \$1.75, including printed directions for giving and scoring, standard scores, and keys. Sample sets, 10 cents in stamps.

Witham's Standard Geography Tests, No. 8. By Ernest C. Witham.

Copyrighted: 1921. Purpose: a reasoning test in commercial geography. Range: junior and senior high schools. Time to give: not "time limit" tests. Time to score: short. Standardized: tentatively.

Witham's Commercial Geography Test is composed of 4 parts, as follows: reasons for the location of certain industries; trade routes, leading world products; exports and imports. In Part 1, 3 or more reasons are given for each statement. The pupil is to check the correct reason. Part 2 contains a number of trade routes, which the pupil must number in the order of the amount of merchandise carried. Parts 3 and 4 are similar to Part 2 in arrangement. One test is needed for each pupil tested. Instructions and standards are available.

Publisher: J. L. Hammett Co., Cambridge, Mass.

Price: \$1.75 per set of 50 tests, including directions for giving and scoring, standard scores, and key.

GEOMETRY

A Preliminary Attempt to Devise a Test of the Ability of High School Pupils in the Manipulations of Space Relations. By H. N. Irwin. Published: 1918. Purpose: "The primary purpose of the test is to compel the pupils to get the answer to each question through mental manipulation of the data involved solely and without any assistance from drawings or other external devices." Range: grades 9 to 12. Time to give: 30 minutes. Time to score: no information. Not standardized.

There are 4 tests: A, B, C, and D. The type of the question may be inferred from the purpose given above. This test has never been published for distribution.

Minnick's Geometry Tests. By J. H. Minnick. Published: 1919. Purpose: to measure pupil's ability to demonstrate a theorem in geometry. Range: secondary schools. Time to give: about 1 hour. Time to score: about 5 minutes per copy. This will vary greatly with practice. Standardized: while it has been standardized, the number of students to whom given is not as large as it should be. Time of year: at close of the first two books of geometry.

There are 4 tests: A, B, C, and D. Test A measures the pupil's ability to draw the figure; Test B, to state the hypothesis and con-

clusion; Test C, to recall facts concerning the figure; Test D, to select and arrange facts so as to produce the proof. Instructions for giving, scoring, and recording scores are available. One set of 4 tests is needed for each pupil to be tested.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: \$2.50 per 100 each for tests A, B, C, D. Sample set, 20 cents.

Starch and Hemenway Geometry Test. By Daniel Starch and H. S. Hemenway. Published: 1918. Purpose: diagnostic. Range: secondary schools. Time to give: 40 to 75 minutes (not "time limit" test). Time to score: 5 minutes. Standardized: tentative standards, June scores.

The test is composed of "15 definitions, 31 reasons (theorems I-IV)", all on one folder. Weighted scores are given based on the estimates of 22 teachers of geometry. The theorems are so constructed that the proofs may be completed by filling blanks with the proper terms. One test is needed for each pupil to be tested. Directions for giving and scoring and tentative standards are printed on the tests.

Publishers: University Coöperative Co., 508 State St., Madison, Wis.

Price: 3 cents per sheet. One sheet required for each pupil.

Stockard and Bell's Geometry Test. By L. V. Stockard. Published: 1916. Purpose: to measure ability in geometry. Range: grades 9 to 11. Time to give: no information. Time to score: no information. Not standardized. The author wrote a master's thesis on this subject. The test has never been published.

Thurstone's Geometry Test. Copyrighted: 1919, by Carnegie Institute of Technology; 1922, by World Book Co. Range: high school seniors and college freshmen. Time to give: 30 minutes. Time to score: no information. Standardized.

For description see Thurstone's Vocational Guidance Tests.

Publisher: World Book Co., Chicago, Ill.

Price: per package of 25 tests, 1 record sheet, \$1.

GERMAN

Whipple's German Vocabulary Test. By G. M. Whipple. Published: 1917. Purpose: to measure reading vocabulary. Range: graduate students. Time to give: 20 to 30 minutes. Time to score: 5 minutes or less. Tentative standards.

The test is composed of 100 German words to be written in English. The test is not a test in the sense of ordinary school tests as it is intended to be "used to see whether students preparing to take doctor's degrees know enough German to venture to try their German educational reading examination".

Publisher: G. M. Whipple, University of Michigan, Ann Arbor, Mich.

Price: not for sale.

GRAMMAR

Buckingham's English Grammar Test. By B. R. Buckingham. Published: 1916. Purpose: to measure ability in formal grammar. Range: grades 7 and 8. Time to give: no information. Time to score: no information. Not standardized.

The tests consist of 2 sets of questions, 10 given in March and 14 in June. The tests were used in making a study of formal grammar as a school subject. They were never published for general testing purposes.

Information Tests in English Grammar, Series A to J. By B. R. Buckingham. These tests were never published.

Buckingham's English Grammar Scale. By B. R. Buckingham. Published: 1916. Purpose: to measure ability in formal grammar. Range: first half of seventh to first half of ninth grade. Time to give: no information. Time to score: no information. Standardized: March and June standards.

The scale is composed of 38 difficult questions on formal grammar. It was used by the author during the Third Conference on Educational Measurements held at Indiana University to illustrate the principles of scale derivation. The scale has never been printed for general distribution.

Buckingham's English Grammar Test. By B. R. Buckingham. Published: Seventeenth Annual Report of Schools, City of New York, 1914-15. Purpose: to measure ability in grammar. Range: grades 7 and 8. Time to give: no information. Time to score: no information. Standardized: no information as to time of year for which standards are made.

The test is composed of 6 questions concerning the form and construction of nouns and pronouns, classification of verbs, use of participles, infinitives, etc. One test is needed for each pupil to be tested.

Publisher: B. R. Buckingham.

Price: no information.

Purdue English Test. By G. C. Brandenburg. Published: September, 1919. Purpose: to measure the ability of college freshmen in English. Range: grades, high school, and college. Time to give: 35 minutes. Time to score: 15 minutes if scored by class. Standardized: September for college freshmen; January for high school students.

There are 7 separate tests: (1) Punctuation, (2) Grammar, (3) Choice of words, (4) Literary information, (5) Spelling, (6) Vocabulary, (7) Reading. The first contains 20 sentences to be punctuated; the second contains 20 sentences with a choice of words for grammatical corrections; the third, 20 sentences with a choice of words to be made; the fourth, 20 sentences each bringing out some point concerning literature or an author; the fifth contains 30 words, some spelled correctly and

some incorrectly with the words "right" and "wrong" after each; the sixth contains 30 words with several meanings after each, one of which is correct; the seventh contains two short selections to be read and questions answered on each. Standards and directions for giving and scoring are printed on the tests. One key for the examiner is furnished with each order of tests.

Publisher: G. C. Brandenburg, Purdue University, Lafayette, Ind.

Price: 2 cents per copy. Duplicate forms 2 and 3 available. Equal in difficulty.

Charters' Diagnostic Grammar Test, Forms I and II. By W. W. Charters. Published: no information. Purpose: diagnostic. Range: grades 7 and 8. Time to give: not "time limit" test, but will occupy 2 periods. Time to score: no information. Standardized: no information as to time of year for which standards are made.

The test is composed of exercises on the use of verbs, pronouns, etc. Sentences are given, some of which are correct and others incorrect. If the sentence is correct, a cross is to be made under it; if it is incorrect, the pupil is to write the correct form under the word that is incorrect. The reason for the correction is to be written at the right of the sentence. A miscellaneous test has been devised which gives exercise in many different phases of sentence construction. Instructions for giving and scoring with standard medians as well as record sheets are available. One test is needed for each pupil to be tested.

Publishers: Public School Publishing Co., Bloomington, Ill.

Price: \$1.50 per 100 copies for each part.

Clapp's Standard School Tests in Correct English. By F. L. Clapp. Published: 1918. Purpose: to measure pupil's ability to use correct English. Range: grades 5 to 8. Time to give: 20 minutes (working time). Time to score: 2 minutes. Standardized: end of the school year.

The Clapp's Standard School Tests are general tests in English composed of 29 exercises in sentence completion. Where dotted lines are given the pupil may use as many words as he thinks necessary. When straight lines are used only one word is to be supplied. In some cases mutilated sentences are to be completed while in others complete statements are to be made or questions answered. The first 4 questions are worked out by the class together as a preliminary exercise to acquaint the pupils with the type of work to be done. One test is needed for each pupil to be tested. Standards and directions for giving and scoring are given on a separate sheet.

Publishers: University of Wisconsin, Madison, Wis.

Price: \$1.50 per 100; directions for examiner, 2½ cents each.

Clemens' Grammar Test. By A. H. Clemens, High School, Rochester, Minn. These tests have been abandoned.

Minnesota Tests in English Grammar. By M. E. Haggerty. Published: no information. Purpose: diagnostic. Range: no information. Time to give: 30 minutes. Time to score: no information.

The test is composed of 10 exercises dealing with verbs, nouns, and pronouns, phrases, clauses, analysis, and composition. One test is needed for each pupil to be tested.

Publishers: Bureau of Coöperative Research, University of Minnesota, Minneapolis, Minn.

Price: out of print.

A Grammar Test. Two forms. By Thomas J. Kirby. Published: June, 1920. Purpose: to measure pupil's ability to choose correct English usage and to recognize the principle in accordance with which the usage is correct. Range: grades 7 to 12. Time to give: about 35 minutes (not "time limit" test). Time to score: about 1 hour for 20 pupils, if scored by 1 person; 10 minutes if scored by class. Standardized: for grades 7 and 8, mid-year.

The test is made up of 5 sections of sentences and rules or principles governing each. The sentences are composed of statements with 2 or more possible answers. The pupil is to select the correct word to be used and then from a parallel column of rules or principles governing the sentences in the section, he is to select the principle governing the usage he has selected. One test is needed for each pupil to be tested. Complete instructions for using are available.

Publishers: Extension Division, University of Iowa, Iowa City, Iowa.

Price: \$1.75 for 100, including record sheets and instructions for giving and scoring.

Diagnostic Tests in English Grammar, Punctuation, and Capitalization. By S. L. Pressey, Ohio State University, Columbus, Ohio. Published: 1922; revised, 1923. Range: grades 7 to 12 and college. Time to give: 5 minutes. Time to score: about 1 minute. Standardized: January scores.

Publishers: Psychology Department, Ohio State University, Columbus, Ohio.

Price, 6 cents each, including directions for giving and scoring key.

Diagnostic Grammar Test. By S. L. Pressey, Ohio State University, Columbus, Ohio. Published: 1923. Range: grades 7 to 12 and college. Time to give: 10 minutes. Time to score: 30 seconds per blank. Standardized: no information as to time standards were made.

Publisher: Psychology Department, Ohio State University, Columbus, Ohio.

Price: 6 cents each, including directions for giving and scoring key.

Scale of Attainment No. 2 (American History, Arithmetic, English Grammar, and Reading Vocabulary). By L. W. Pressey. For description see heading History.

Grammatical Scale A: English. By Daniel Starch. Published: 1920. Purpose: diagnostic. Range: grades 5 to 12. Time to give: not "time limit" test. Time to score: short. Standardized: June scores.

The scale is made up of 11 steps of from 1 to 4 sentences each. Each sentence has in parenthesis 2 ways in which it may be stated. The pupil is directed to cross out the one he thinks is incorrect. If both are incorrect, they should be crossed out. Instructions for giving and a key for scoring as well as norms are available. One scale is needed for each pupil to be tested.

Publishers: University Coöperative Co., 508 State Street, Madison, Wis.

Price: 80 cents per 100. One direction sheet for each examiner; 2 cents per sheet.

Starch's English Grammar Test. By Daniel Starch. Published: 1920.

Purpose: to measure information and ability in parts of speech, cases, and forms of verbs. Range: grades 7 to 12. Time to give: 9 minutes (3 for each part). Time to score: no information. Standardized: no information as to time of year for which standards are made.

The test is made up of 3 parts: (1) Parts of speech, (2) Cases of nouns and pronouns, (3) Tense and mode of verbs. The pupil has 3 minutes in which to indicate the part of speech, case, or tense and mode of as many words as he can by writing the abbreviation over the word. One copy of each of the 3 tests is needed for each pupil to be tested. Directions for giving as well as norms are printed on the sheet of instruction.

Publishers: University Coöperative Co., 508 State St., Madison, Wis.

Price: 30 cents per 100 sheets. One direction sheet covering 3 tests required for examination. 2 cents per sheet.

Thompson's Research Tests. By Thomas E. Thompson. Published: no information. Purpose: to measure pupil's ability to give parts of speech of words in sentences. Range: no information. Time to give: no information. Time to score: short. No information as to standardization.

The test is composed of 9 sentences printed with the lines far enough apart for the abbreviation of the 8 parts of speech to be under each word. A cross is to be made thru the center of the abbreviation which the pupil thinks is correct. If the paper is 100 per cent correct, 50 crosses will show thru the 50 holes in the overlay sheet. One test is needed for each pupil to be tested. Directions for giving and a key for scoring are available.

Publisher: Thomas E. Thompson, Monrovia, Calif.

Price: no information.

HANDWRITING

Ayres' Handwriting Scale (Gettysburg Edition). By L. P. Ayres. Published: 1917. Purpose: to measure speed and quality in handwriting. Range: elementary or high schools. Time to give: 2 minutes. Time to score: 10 seconds. Standardized: mid-year.

The scale is composed of 8 specimens of handwriting arranged in the order of quality from 20 to 90. Intermediate scores may be used if desired. The score is best found by sliding the paper along the scale until a specimen in the scale is found which corresponds in quality to the writing being graded. Speed is determined by counting the number of letters written in the time given for the test. A key for determining speed is furnished with the scale. One scale is needed for each teacher or class.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: single copies, 18 cents. 3 copies or more, 14 cents each.

Ayres' Scale for Measuring the Quality of Handwriting of School Children. By L. P. Ayres. Published: 1912. Purpose: to measure quality in handwriting. Range: elementary school. Time to give: 2 minutes. Time to score: 10 seconds. Standardized: no information.

The scale is composed of 24 specimens of writing arranged in 8 columns. Each column contains 3 copies of equal value, but of different style. The 8 values are arranged from 20 to 90. The value of a sample may be found by sliding it along the scale until a similar copy is found. One scale is needed for each examiner.

Publisher: Russell Sage Foundation, New York City.

Price: 17 cents net per copy.

Ayres' Handwriting Scale for Measuring the Quality of Handwriting of Adults. By L. P. Ayres. Published: 1914. Purpose: to measure the quality of handwriting of adults. Time to give: 2 minutes. Time to score: 10 seconds. Standardized: no information.

The Ayres' Handwriting Scale for Adults is composed of 24 samples arranged in 8 columns, with 3 copies representing each value. The values range from 20 to 90. A sample of writing is measured by sliding it along the scale until a corresponding quality is found. The number above the writing corresponding to the sample is the value of the writing measured. One scale is needed for each examiner.

Publisher: Russell Sage Foundation, New York City.

Price: 10 cents each. 100 or more, but less than 1,000, \$9 per 100. 1,000 or more, \$7.50 per 100.

Ayres' Handwriting Scale: Three-Slant Edition. By Leonard P. Ayres. Published: 1912. Purpose: designed to measure the handwriting of children. Time to give: no information. Time to score: no information. Standardized: no information.

This scale consisted of 3 series of samples of handwriting arranged in order of "legibility".

Publisher: Russell Sage Foundation, New York City. Out of print.

Breed and Downs' Handwriting Scale. Published: March, 1917. Range: grades 3 to 8. Time to give: 2 minutes. Time to score: no information. Not standardized.

No attempt has been made to commercialize the tests. It has been regarded by the author rather as a chart representing the results of a handwriting survey than as a measuring instrument. He states that "It is unfortunate that the term 'scale' was applied to it."

Publisher: F. S. Breed, University of Chicago, Chicago, Ill.

Handwriting and Measuring Tablets. By F. E. Clark, J. B. Wells, and R. N. Freeman. Published: 1921. Purpose: to measure handwriting and to enable pupils to measure their own handwriting. Range: grades 2 to 8. Time to give: no information. Time to score: varies for each grade. Standardized: standards made any time of year.

The Handwriting and Measuring Tablets are arranged in 4 separate scales. Each scale represents a different level in writing development. Scales may be secured for 4 different levels: namely, grade 2, grades 3 and 4, grades 5 and 6, grades 7 and 8. There are 5 units or grades of excellence represented in each scale. A median of 75 is given so the pupil can compare his standing with the scale and tell how he stands in his grade. The scales are conveniently arranged in each tablet so that the pupil can make comparisons at will.

Publisher: Dobson-Evans Co., Columbus, Ohio.

Price: Second-grade pencil tablets, 50 cents per 100. Fourth, fifth, sixth, seventh, and eighth grade ink tablets, \$6.50 per 100, including books of instruction and score sheets.

Cleveland Free Choice Test in Handwriting. This test consists of the first 3 lines of Lincoln's Gettysburg speech. It was scored by means of the Ayres Handwriting Scale. Instructions for giving the test will be found on pages 235-6 of Judd's "Measuring the Work of the Public Schools" (Cleveland). This book may be obtained from Russell Sage Foundation, New York City.

Muscular Movement Penmanship Gradient. By Bertha A. Conner. Published: 1922. Purpose: to measure definite writing product for each grade. Range: grades 1 to 8 inclusive. Time to give: no information. Time to score: no information. Standardized: no information as to time standardized.

The scale "supplies teachers and pupils with a definite knowledge of the standard writing product for each grade". Standard specimens of "muscular movement writing" are used for different periods of development during the school year, with each specimen evaluated. One set of standards is needed for each grade to be tested. Pupils can grade their own writing by comparison with the specimens.

Publishers: Houghton Mifflin Co., Chicago, Ill.

Price: \$1.20 per envelope, containing "An Instruction Page to Teachers, 50 copies of graded and rated types of the writing product for each ten weeks of the school year for the grade named on the envelope".

Courtis Standard Practice Tests in Handwriting. By S. A. Courtis and Lena A. Shaw. Copyrighted: 1921, by World Book Co.; in use

since 1917. Purpose: to secure progress by practice under adequate measuring conditions. Range: grades 3 to 8. Time to give: no information. Time to score: no information. Standardized: no information.

The tests consist of a series of 20 graded lessons, including 2 tests so arranged as to meet the needs of the pupils. The practice tests are good teaching devices. The manual for the teacher contains instructions for giving, scoring, and recording, as well as suggestions for remedying the defects revealed.

Publisher: World Book Co., Chicago, Ill.

Price: Teacher's Manual, 25 cents net; Class Record Cards, 4 pages, 5 cents net; Measuring Scale for Handwriting (Ayres, Gettysburg), 10 cents net; Student Daily Lesson Book, 10 cents net; Student's Daily Record Card, 3 cents net. Each pupil needs a Daily Lesson Book and a Daily Record Card.

Courtis Practice Tests in Handwriting. Published: 1922. Range: grades 3 to 8. Purpose: used for drill purposes to bring children up to standard. Time required to give: no information. Time to score: no information.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.
Price: no information.

Courtis Standard Supervisory Handwriting Test: Form A. By S. A. Courtis. Published: 1918. Purpose: to measure speed and quality in handwriting. Range: grades 3B to 8A. Time to give: grades 3B to 5A, 3 minutes; grades 6B to 8A, 1½ minutes. Time to score: 2 hours. Standardized: beginning and end of semesters.

The test consists of a printed selection to be written by the pupil. He is instructed to write as he would write a letter. Rate is found by counting the number of letters written per minute. A key for scoring the rate is printed on the opposite side of the sheet that contains the selection to be copied. Ayres' Scale is used for determining the quality of the writing. One test is needed for each pupil to be tested. A class record card for class scores is available.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.
Price: material for 40 children, 2 forms, \$1.35 each.

Courtis Standard Research Tests in Handwriting, Form A ("Detroit Performance Scale"). By Lena A. Shaw and S. A. Courtis. Published: 1918. Purpose: to measure ability to score handwriting. Range: grades 2 to 8. Time to give: grades 3B to 5A, 3 minutes; grades 6B to 8A, 90 seconds. Time to score: no information. Standardized: June scores.

The scale is composed of 48 samples. Each page contains two samples, A and B. The pupil is to "compare the two samples and record which is the better writing, A or B". If he is unable to decide, the samples are called equal. One scale is needed for each examiner.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.
Price: 56 cents per copy, including directions and score key.

Courtis Standard Research Tests in Handwriting: Series W. By S. A. Courtis. Published: 1917. Purpose: to measure rate and ability in handwriting. Range: grades 3B to 8A. Time to give: grades 3B to 5A, 3 minutes; grades 6B to 8A, 90 seconds. Time to score: 30 minutes. Standardized: June standards.

The tests are made up of 5 specimens of handwriting ranging in value from 15 to 75. Each specimen is made on a separate sheet. A pupil's writing may be measured by comparing it with the samples in the scale. If the sample being measured is found to be between 2 specimens on the scale, intermediate grades may be used.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.

Price: 90 cents for one envelope containing test material for 40 pupils.

Fordyce's Directions for Measuring the Quality and Speed in Handwriting. By Charles Fordyce. Published: 1918. Purpose: to measure quality and speed in handwriting. Ayres standards used in measuring quality. Range: grades 2 to 8. Time to give: 2 minutes. Time to score: 5 minutes. Standardized: May standards.

The Fordyce Measuring Scale for Handwriting is an adaptation of the Ayres Scale. Quality is determined by using the Ayres Scale. A key is furnished on each record sheet giving the number of letters after each word. One scale is needed for each examiner.

Publisher: Charles Fordyce, University of Nebraska, Lincoln, Neb.

Price: no information.

Frasier's Writing Scale. By Geo. W. Frasier. Published: no information. Purpose: to measure quality of handwriting. Range: grades 2 to 8. Time to give: no information. Time to score: no information. Standardized: no information.

The scale is composed of 9 samples. The highest quality is given a grade of 1 and the lowest, 9. The grade of a sample is found by sliding it along the scale until a similar sample is found. The number above the sample is the quality of the writing measured. One scale is needed for each examiner.

Publisher: Normal Bookstore, Cheney, Wash.

Price: 10 cents each. In lots of 10 or more, 8 cents each.

A Chart for Diagnosing Faults in Handwriting. By F. N. Freeman. Published: 1914. Purpose: to measure slant, alignment, quality of line, letter formation, and spacing. Range: all grades. Time to score: no information. Time to give: no information. Standardized: no information.

The chart is composed of 3 samples, each of uniform slant, alignment, quality of line, letter formation, and spacing. Each copy to be graded must be compared with each of these samples and a grade given for each characteristic to be considered. Three scores are suggested: one for the lowest, 3 for medium, and 5 for the highest. One scale is

needed for each teacher or class. Directions for use are printed on the scale.

Publisher: Bureau of Educational Measurements, Kansas State Normal School, Emporia, Kan.

Price: one copy of scale and complete accessories, 40 cents postpaid, 3 or more copies, 37 cents each.

A Handwriting Scale. By Edward P. Gilchrist. Published: 1920. Purpose: to measure speed and legibility. Range: no information. Time to give: 53 seconds. Time to score: 6 seconds. Tentative standards: based on standard reader.

The scale is composed of 4 declarative sentences, each containing 6 words. "Speed is measured by limiting the writing. Legibility is measured by timing the reading of the writing." One scale is needed for each examiner.

Publisher: Edward P. Gilchrist, Pensacola, Fla.

Price: no information.

Gray's Standard Score Card for Handwriting. By C. S. Gray. "This is not a test but merely a card on which to record the progress pupils make in handwriting from month to month."

Holmes' Penmanship Tests. By H. W. Holmes. Published: have never been published, but have been used since about 1915. The tests will be published soon. Purpose: to measure speed and legibility in handwriting. Time to give: 8 to 10 minutes. Time to score: 2 to 3 minutes. Range: grades 2 to 8 inclusive. Standardized: May scores.

There are 3 separate tests: the dictation test, the one-minute test, and the four-minute test. Each of the samples was graded by 2 or more people for legibility. Each of the 3 tests is used in determining the legibility of the writing measured. Speed is determined by counting the letters written per minute in the one- and four-minute tests.

Publisher: Education Department, Harvard University, Cambridge, Mass.

Price: 25 cents each, plus postage.

Houston's Guide for Rating and Correcting Handwriting. By Harry Houston. Published: 1913; revised, 1920. Purpose: to measure speed and legibility of handwriting. Range: grades 4 to 8. Time to give: 2 or 3 minutes. Time to score: depends on experience of the scorer. Standardized.

The scale is made by using several samples for each rating. The quality of the sample to be graded is found by comparing it with the samples in the scale. One scale is needed by each teacher or examiner.

Publisher: Harry Houston, 162 Willard St., New Haven, Conn.

Price: 12 cents per copy.

Kansas City Scale for Measuring Handwriting. Missouri Edition. By Bureau of Research and Efficiency, Public Schools, Kansas City, Mo. Published: 1916. Purpose: to measure speed and quality in handwriting. Range: grades 2 to 8. Time to give: 5 minutes. Time

to score: 30 minutes for a room. Standardized: end-of-year standards.

The test is made up of specimens arranged in 15 values ranging from 4 to 18. Each value contains from 1 to 3 specimens. Suggestions are given for the improvement of the specimen given under each value. There is also a set of 50 standardized specimens, published in 1916, modeled after the Thorndike Standardized Specimens and designed to enable teachers to train themselves and to check themselves in the use of the Handwriting Scale. One scale is needed for each teacher.

Publisher: Bureau of Research and Efficiency, Public Schools, Kansas City, Mo.

Price: 5 cents per copy.

The New York City Penmanship Scale. By Clyde C. Lister and Garry C. Myers. Published: 1918. Purpose: to measure form, movement, and spacing of handwriting. Range: grades 4 to 8 inclusive. Time to give: 5 minutes. Time to score: class of 40, 15 to 20 minutes. Standardized: for the last of each semester.

The scale is composed of 24 specimens of writing arranged in 3 columns, emphasizing, respectively, form, movement, and spacing. The values for each column are arranged in a scale numbered from 20 to 90. Each sample should be graded for each characteristic and an average made which makes up the grade of the writing measured. One scale is needed for each examiner.

Publisher: The Macmillan Co., Chicago, Ill.

Price: 20 cents each, subject to education discount of $\frac{1}{4}$ per cent.

Locker's Handwriting Scale. By W. C. Locker. Published: 1919. Purpose: diagnostic. Range: grades 1 to 7. Time to give: from 1 minute in first grade to 2 minutes in grade 7. Time to score: 1 to 2 minutes. Standardized: no special time for standards.

The scale is made up of 12 specimens ranging in value from 45 for the first grade to 95 for the eighth grade. Pupils should be taught how to use the scale in measuring their own writing. A copy is measured by comparing it with the scale. One scale is needed for each teacher or class. A teacher's guide is available.

Publishers: W. C. Locker, 805 East Marshall St., Richmond, Va.

Price: 10 cents each. Teacher's Guide, 25 cents.

Palmer's Standard for the Evaluation of Efficiency. Published: 1920. Purpose: to evaluate the efficiency of pupil's handwriting. Range: grades 1 to 8 inclusive. Time to give: 1 minute per pupil. Time to score: 1 minute per pupil. Standardized: any time of year.

The standards are made up of separate standards for grades 1 to 8 inclusive. One set of standards is needed for each grade. A pad for tabulating the standards is available.

Publisher: The A. N. Palmer Co., Chicago, Ill.

Price: complete set, 50 cents. Separate sets for each grade, 10 cents each. Tabulating pads, 10 cents each.

Score Card for Handwriting. By W. E. Reavis and N. J. Aikin. Published: September, 1918. Range: grades 4 to 8. Time to give: no information. Time to score: depends on difficulty of the sample scored. Standardized: middle-of-year scores.

Publisher: W. E. Reavis, Teachers College, St. Louis, Mo.

This is not a test but material used for scoring purposes.

Starch's Handwriting Scale. By Daniel Starch. Published: 1919. Purpose: to measure speed and quality in handwriting. Range: elementary and secondary schools. Time to give: no information. Time to score: no information. Standardized: no information.

The scale is made up of samples arranged in a continuous series of steps from 0 to 20. The values of the steps have a high degree of accuracy. "The scale value of each sample was computed from approximately 1,000 judgments based on 356 rankings." The scale is printed in convenient form on stiff cardboard, 14 by 45 inches. One scale is needed for each examiner or teacher.

Publishers: University Coöperative Co., 508 State St., Madison, Wis.

Price: 50 cents per single copy; \$5 per dozen.

Measuring Scale for Handwriting. By Daniel Starch and C. T. Wise. Published: 1919. Purpose: to measure speed and quality in handwriting. Range: grades 1 to 8. Time to give: no information. Time to score: no information. Standardized: no information as to time standardized.

The scale is composed of 21 specimens of writing arranged in order of value ranging from 0 to 20. The sample may be graded by sliding it along the scale until a specimen of similar quality is found. The grade for speed is found by counting the number of letters written per minute. Norms for speed and quality are given for each grade. One scale is needed for each examiner.

Publisher: University Coöperative Co., 508 State St., Madison, Wis.

Price: 50 cents per copy.

Thorndike's Scale for Measuring the Handwriting of Children. By E. L. Thorndike. Published: 1910; revised, 1912. Purpose: to measure speed and general merit in handwriting. Range: grades 2 to 8. Time to give: no information. Time to score: short; decreases with practice. Standardized: no information as to time standardized.

The scale is composed of specimens arranged in 15 degrees of merit, ranging in value from 4 to 18. The quality of a sample is determined by comparison with the specimens in the scale. Standards have been found for writing used in the penmanship class and for writing used in preparation of lessons. Speed is determined by the number of words written per minute. One scale is needed for each examiner.

Publisher: Bureau of Publications, Teachers College, Columbia University. Also Extension Division, Iowa State University, Iowa City, Iowa.

Price: 10 cents each.

Zaner's Handwriting Scale. By — Zaner. Published: 1917. Purpose: to measure quality and style. Range: grades 1 to 12. Time to give: 1 minute of actual writing. Time to score: $\frac{1}{2}$ minute for each pupil. Standardized: end-of-term scores.

The scale is made up of 2 parts. The upper half is composed of 8 specimens of writing ranging in value from 30 to 95. It is used for measuring quality only. The lower half of the scale is to be used for measuring both style and quality. The sample to be graded is compared with the scale, sliding it along until a specimen of similar quality is found. One scale is needed for each teacher or examiner.

Publishers: Zaner and Bloser Co., 118 North High St., Columbus, Ohio.

Price: 25 cents each; \$1.76 per dozen.

HISTORY

Barr's Diagnostic Test in American History. By A. S. Barr. Published: 1918. Purpose: diagnostic. Range: grades 11 and 12. Time to give: 30 minutes of working time. Time to score: 2 to 3 minutes, maximum. Standardized: end-of-year standards.

The test is made up of 2 series, 2A and 2B, similar in construction and arrangement, and of equal difficulty. Each series is composed of 6 tests: one practice test and 5 regular tests. The 5 regular tests are as follows: (1) Comprehension, (2) Chronological judgment, (3) Historical evidence, (4) Evaluation of facts, (5) Causal relationship. One test needed for each pupil tested. Instructions for giving and scoring as well as record sheets are available.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: sample sets, 20 cents; \$4 per 100 each Series A and B; or 5 cents each in small quantities.

Bell and McCullum Test in United States History. By J. Carleton Bell and D. F. McCullum. Published: 1917. Purpose: informational test. Range: no information. Time to give: 34 minutes of working time. Time to score: no information. "No attempt has been made to fix grade standards."

The test is composed of 7 parts, as follows: (1) Dates-events (10 questions), (2) Men-events (10 questions), (3) Events-men (10 questions), (4) Historic terms (10 questions), (5) Political parties, (6) Divisions of United States history, (7) Map study. Standards were found on the basis of answers from normal school and university students of Texas.

The test is out of print.

Davis's Test in United States History: Colonial Period. By S. B. Davis. Published: 1917. Purpose: informational. Range: grade 8 or high school. Time to give: 12 minutes for each test. Time to score: 1 minute. Standardized: second semester, near the close.

There are 2 parallel tests, A and B. Test A is composed of 41 exercises. Each exercise has several suggested answers. The pupil

is to draw a line under the correct answer. Test B is composed of 44 exercises similar in construction to Test A. Each exercise is weighted. One set of tests is needed for each pupil to be tested. Directions for giving and scoring as well as key are available.

Publishers: The University of Pittsburgh, Pittsburgh, Pa.

Price: 12 cents each.

Davis and Hicks True-False Test in Roman History, Late Republican Period. Published: 1922. Purpose: to measure to what extent the pupil's knowledge of Roman history is aided by the study of Caesar and Cicero. Range: second, third, and fourth years of high school. Time to give: about 15 minutes, no time limit. Time to score: about 2 minutes. Standardized: no.

The test is composed of 50 statements that are either true or false. The words "true-false" are written after each. The pupil is to underline either word according to the truth or falsity of the statement. The tests have been devised by the American Classical League to be given in connection with classical investigations. One test is needed for each pupil to be tested.

Publishers: Mason D. Gray, East High School, Rochester, N.Y.

Price: 1 cent each.

Goodman-Sackett United States History Test. By — Goodman and L. W. Sackett. The compiler was unable to locate either of the authors to secure any information in regard to this test.

The Gregory Tests in American History, Forms A and B. By C. A. Gregory. Published: no information. Purpose: to measure pupil's information and judgment in American history. Range: grades 7 and 8 and high school grades where American history is taught. Time to give: 45 to 50 minutes. Time to score: short. Standardized: Form B is available since March 15, 1923. Fairly satisfactory standards for Form A have been established from about 8,000 tests. Tentative standards are those finishing the course in American history.

There are 3 separate tests. "Test I is for the seventh grade and covers the subject-matter to Jackson's administration. It is issued in two forms, A and B. Each form consists of 100 questions, 40 of which are miscellaneous facts and dates, and the other 60 deal with the more fundamental facts of the subject, testing the pupil's historical judgment and his power to reason from cause to effect." The tests are in part diagnostic. Each test is divided into 5 parts.

Test II for grade 8 is composed of 100 questions on subject-matter from Washington's administration to 1922. It is similar to Test I in construction and arrangement. Test III is composed of 100 questions covering the whole field of American history. "It is divided into seven major divisions which make it in part diagnostic." It is designed for the eighth grade and for high school grades in which American history is taught. One test of each given is needed for each pupil to be tested.

Score cards and record sheets are available. Directions for giving are printed on the tests.

Publisher: Bureau of Educational Research, University of Oregon, Eugene, Ore.

Price: \$4 per 100 each test, including score cards and class record sheets. Specimen sets, 10 cents postpaid.

The Hahn's History Scales. By H. H. Hahn. Published: 1920; revised, 1922. Purpose: to measure the pupil's information, comprehension, and judgment in American history. Range: grades 7 and 8. Time to give: not "time limit" tests. It depends upon number of exercises in the test, and each teacher makes up her own test from the scale. From 5 to 10 exercises are suggested for a test. Time to score: depends on number of exercises in test. About the same as an ordinary school test. Standardized: yes, very definitely, May (close of school year).

There are 2 distinct scales: one for the seventh and one for the eighth grade. To distinguish one scale from the other, light face type is used for the eighth grade and black face type for the seventh grade.

The scales are arranged in 25 steps or columns of increasing difficulty containing from one to several exercises. The number at the top of the page denotes the grade the class should make in May. Read numbers from left to right for eighth grade, from right to left for the seventh. The exercises in one column are all approximately of equal difficulty. In giving tests from the scale, from 4 to 10 exercises selected from one step should be used. Instructions for giving as well as standards are contained in the scale. One scale is needed for each teacher or examiner.

Publisher: H. H. Hahn, State Normal School, Wayne, Neb. Also, Public School Publishing Co., Bloomington, Ill.

Price: 20 cents each. Three or more copies, 16 cents each. Record sheets, 1 cent each.

Test of Information in American History. By C. L. Harlan. Published: May, 1917. Purpose: test of information. Range: grades 7 and 8 and high school United States history classes. Time to give: not "time limit" test but most pupils finish within 25 minutes. Time to score: about 1½ minutes. Standardized: end-of-year standards.

The test is made up of 10 exercises. From 2 to 5 facts are to be given under each exercise. Directions for giving and a record sheet for scoring are available. One test is needed for each pupil to be tested.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: 80 cents per 100. Sample sets, 6 cents.

Stanford Achievement Test. By Truman L. Kelley, G. M. Ruch, and Lewis M. Terman. See Stanford Achievement Test under Miscellaneous.

Kelley's Test of Historical Ability. By Truman L. Kelley. Published: 1914. Purpose: to measure historical ability. Range: no information. Time to give: 20 minutes of working time. Time to score: no information. Standardized: no information.

The test consists of a selection adapted from pages 392-3, 402-4, Sedgwick's "A Short History of Italy". "None of the pupils showed evidence of familiarity with the subject-matter." As a background for the test, the examiner drew a map of Italy on the blackboard and located the important provinces and cities. In addition, a brief description was given of the leading characters. The selection was then read and the pupils gave points that were of historical importance.

The test is given in "Educational Guidance, Columbia University Contributions to Education, No. 71". It has never been published as a test for distribution.

Boston Research Test in United States History. By Olivia C. Penell. Published: 1922. Purpose: to measure ability in United States history. Range: grades 6, 7, and 8. Time to give: 29½ minutes for grade 6; 39½ minutes for grade 7; 44½ minutes for grade 8. Time to score: no information. Not standardized.

There are 3 separate tests. The test for grade 6 is composed of 5 parts as follows: (1) Period of discovery and exploration, (2) Period of settlement, (3) French and Indian wars, (4) Patriotic dates, (5) Late events. Each part contains several questions. The questions are to be answered by supplying missing words or by making a choice from two or more answers. The test for grade 7 contains 10 parts, and the test for grade 8, 15 parts. They are similar in construction and arrangement to the test for grade 6. The tests are not published for general distribution.

Spokane United States History Test. By O. C. Pratt. Published: January 9, 1918. Purpose: to measure pupil's information and knowledge of United States history. Range: grade 8A. Time to give: 1 hour. Time to score: requires 2 minutes. Standardized: close-of-year standards.

The test is made up of 5 parts. Each part is composed of 20 exercises. Part 1 is composed of a list of historic events with a list of 20 dates written in a column at the left of them. The dates are not in proper order. The pupil is to write the dates in a space at the right of each event associated with it. The other 4 parts are similar in arrangements and are composed of: (2) Event-names; (3) Descriptive phrases, historic terms; (4) Descriptive phrases, civic terms; (5) Cause-events. Instructions for giving, a key for scoring as well as standards are available. One test is needed for each pupil to be tested.

Publisher: O. C. Pratt, Superintendent of Schools, Spokane, Wash.
Price: \$1.80 per 100.

Tests in Understanding of American History, Scale of Attainment No. 2. By L. W. Pressey and R. C. Richards. Published: 1922. Purpose: to test information and judgment. Range: grades 8 to 12. Time to give: 30 minutes. Time to score: 2 minutes. Standardized: to be standardized for end of year.

This is a folder containing 4 separate tests, of 26 exercises each. Test 1 deals with "Character judgment"; Test 2, "Historical vocabulary"; Test 3, "Sequence of events"; Test 4, "Cause and effect relations". In each exercise the pupil must choose, from a group, the correct word or phrase by underlining it. First exercise of each test is already correctly answered in order to serve as an example to pupil. One folder is needed for each pupil.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: 10 cents.

A Scale in Ancient History. By L. W. Sackett. Published: 1919. Purpose: to test pupil's information of ancient history. Range: class in ancient history. Time to give: 45 minutes. Time to score: no information. Standardized: June scores.

The scale is made up of 8 tests: (1) Men-events, (2) Identifying prominent leaders, (3) Giving historical significance of events, (4) Identifying the participants in important battles, (5) Events-dates, (6) Contribution to civilization by 10 different peoples, (7) Identifying racial stock of 10 different peoples, (8) Location of 10 important geographical points in ancient history. One test is needed for each person to be tested.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: no information.

A Scale in United States History. By L. W. Sackett. Published: 1919. Purpose: to measure the attainments of pupils in United States history. Range: grades 5 to 12. Time to give: no information. Time to score: no information. Standardized: no information as to time of year for which standards are made.

The scale is made up of 7 tests, as follows: (1) Dates-events, (2) Men-events, (3) Events-men, (4) Historical terms, (5) Political parties, (6) Division of epochs of the United States, (7) Indicate growth of United States on an outline map (map supplied). One test is needed for each pupil tested.

Publisher: L. W. Sackett.

Price: no information.

American History Test, Series A. By Daniel Starch. Published: no information. Purpose: to measure the pupil's information of American history. Range: grades 6, 7, and 8 and high school. Time to give: not "time limit" test. Time to score: no information given. Standardized: June scores.

The test consists of 61 mutilated sentences. When the blanks are correctly filled each sentence makes a complete statement concerning

some fact or event in history. The number of blanks filled correctly is the score. The test sheets contain instructions for giving and for scoring as well as standards. One test is needed for each pupil to be tested.

Publisher: University Publishing Co., 508 State St., Madison, Wis.
Price: 2 cents per sheet.

Theisen's General History Test. By Dr. W. W. Theisen, Harvard University, Cambridge, Mass.

Diagnostic Test in Modern European History. By C. G. Vannest. Published: 1921. Purpose: diagnostic. Range: secondary school. Time to give: 40 minutes. Time to score: 15 minutes. Standardized: tentative. Time of year for which standards were made is spring.

There are 5 different tests: (A) "Time test", (B) "Place test", (C) "Evaluation of facts", (D) "Thought", (E) "Information". For example, Test A is composed of 3 exercises. Exercise I contains 10 personages in modern European history, Exercise II contains 10 important events, and Exercise III contains 7 main historical divisions. They are to be numbered 1, 2, 3, etc., in their proper chronological order. One test is needed for each pupil to be tested.

Publisher: Bureau of Coöperative Research, Indiana University, Bloomington, Ind.

Price: 3 cents per copy.

Van Wagenen American History Scales. By J. M. Van Wagenen. Published: 1919. Purpose: to measure information, thought, and character-judging. Range: grades 4 to 8. Time to give: no information. Time to score: no information. Standardized: no information.

The scale is made up of 3 tests: information (Scale A and Scale B); thought (Scales A and B); character-judging (Scales A, B, and L). The information test consists of 34 questions in either of the 2 scales, some of which have several parts. The thought test is made up of 22 questions in either scale, designed to measure the pupil's ability to think. The character-judging test is made up of 15 questions in Scale A, 14 in Scale B, and 10 in Scale L, which involve a principle illustrating traits of character. One scale of each kind is needed for each pupil to be tested. Scales A and B are equivalent, and Scale L is a supplementary character-judging scale. One scale of each kind is needed for each pupil to be tested.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: \$1.25 per 100 for each information, thought, and character-judging scales. Sample sets including one copy of each of the 7 scales, 15 cents postpaid, for examiner. One copy of "Historical Information and Judgment of Elementary School Pupils", by J. M. Van Wagenen (includes description of the derivation of the scale), \$1.75 in cloth, \$1.20 in paper.

HOME ECONOMICS

Vitamines. By Katharine Blunt and Clu Che Wang.

A brief pamphlet on vitamins with bibliography.

Publisher: University of Chicago Bookstore, 5802 Ellis Ave., Chicago, Ill.

Price: 15 cents each.

The Bowman and Trilling Information and Reasoning Test in Textiles and Clothing. Published: 1920. Range: high school. Time to give: no information. Time to score: no information. Not standardized.

This test is not for sale. Reference: "Home Economics in American Schools", Department of Education, University of Chicago, Chicago, Ill.

Goodspeed-Dodge's Home Economics Test. By Helen Goodspeed and Bernice Dodge. Published: no information. Purpose: to measure judgment in home economics. Range: secondary schools. Time to give: 2½ minutes. Time to score: short. Standardized: no information.

The test is composed of 16 exercises. Each exercise is made up of a statement with 3 reasons, all of which are true. One reason is more important than the others. The pupil is to place a cross in the little square before the reason which is of most importance. One test is needed for each pupil to be tested.

Publishers: The Parker Co., Madison, Wis., or State Department of Public Instruction, Madison, Wis.

Price: 5 cents each, or 75 cents per 100.

Preliminary Judgment Test in Home-making. By Helen C. Goodspeed. Published: 1920. Purpose: "to assist in teacher training". Range: grades 8 or 9. Time to give: 2½ minutes. Time to score: no information. Not standardized.

The test is composed of 16 questions or statements. For each statement 3 reasons are given, all of which are true, but one is the essential or most important reason. The pupils are to check the most important reason. One test is needed for each pupil to be tested.

Publisher: The Parker Co., Madison, Wis.

Price: no information.

A Measuring Scale in Foods. By Florance B. King. Published: 1922. Purpose: to aid in standardizing subject-matter, in classification of pupils, and in objectifying grading. Range: junior-senior high schools. Time to give: not yet decided upon. Time to score: not yet determined. Standardized: in the process of standardization.

The scale is made up of 78 exercises divided into 3 parts. "The design of the test is a simple checking test, with the method of right or wrong scoring, covering material involving information and judgment." The test was given to 100 junior and senior high school pupils and the exercises arranged in order of increasing difficulty to that particular group. One test is needed for each pupil to be tested.

Publisher: Bureau of Coöperative Research, Indiana University, Bloomington, Ind.

Price: Preliminary form only has been printed. Not yet ready for general distribution.

Murdoch's Sewing Scale. By Katharine Murdoch. Published: 1919; Manual of Directions, 1922. Purpose: to measure pupil's progress in sewing. Range: grades 2 to 12. Time to give: no information. Time to score: no information. Standardized.

The scale is made up of 15 sewing samples arranged in the order of merit. The values range from 0 to 16.4. The author describes the scale as follows: "Each contains three views of the same sewing sampler. One view gives the full-size view, sewing a hem, a seam, hemming, basting, running, backstitching, overcasting, and combination stitch. A second view shows the reverse side of the seam, and of the overcasting, basting, and backstitching. A third view shows the reverse side of the hem, of the hemming stitch, basting, running, and combination stitch. The numerical value for each entire sampler is printed on it." A sample may be measured by comparing it with the views in the scale. One copy of the scale is needed for each teacher or examiner.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: \$1 each, postpaid.

Murdoch Analytic Sewing Scale for Separate Stitches. By Katharine Murdoch. Published: 1922. Purpose: primarily for pupils to use in measuring their own work. Range: no information. Time to give: no information. Time to score: no information. Standardized. Norms for the Murdoch Sewing Scale may also be applied to this scale.

The scale is to be used as a supplement to the "Murdoch Sewing Scale". "It is a means of measuring separately the fine sewing stitches: running, backstitch, overcasting, combination, and hemming; and is in convenient form to handle. Accompanying each copy of the scale are directions to the teacher and directions to pupils."

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: no information.

Food Stencils. By Lydia Roberts.

The food stencils are to be colored, cut out and used for teaching food values. They are not tests but teaching devices.

Publisher: University of Chicago Bookstore, Chicago, Ill.

Price: 50 cents per set.

Chart for Diagnosing Defects in Buttonholes. By Hazel K. Stiebeling and Dean A. Worcester. Published: 1922. Purpose: diagnostic. Range: no information. Time to give: no information. Time to score: no information. Standardized: no information.

The chart is made up of 8 qualities designed to aid teachers in instruction as well as to set up an objective standard by which pupils

may discover the good and poor qualities of their own work. Each specimen has comments printed at the right which call attention to the strong and weak points. One chart is needed for each teacher or class.

Publisher: Bureau of Educational Measurements and Standards, Kansas State Normal School, Emporia, Kan.

Price: 17 cents postpaid. Three or more copies, 15 cents each.

Home Economics Information Test. By students in Teachers College, Columbia University, New York City. Published: no information. Purpose: information test. Range: no information. Time to give: 30 to 60 minutes (each set). Time to score: short. Standardized: no information.

There are 3 sets of tests: (1) Textiles, (2) Foods, (3) Household management. Each set is composed of tests having different values. The sets are similar in construction. The exercises of each test are made up of statements with 3 possible answers, one of which is correct. The pupil is to underscore the correct answer. One series of the test is needed for each pupil tested. Directions for giving as well as a key for scoring are available.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: 35 cents per set.

The Williams and Knapp Scale for Measuring Skill in Machine Sewing. Published: 1920. Range: elementary and high school. Time to give: no information. Time to score: no information. Not standardized.

This test has never been printed for distribution. It has been discussed in the monograph "Home Economics in American Schools", Department of Education, University of Chicago, Chicago, Ill., but has never been revised or made ready for general distribution.

JOURNALISM

Freyd's Test of Journalistic Ability. By Max Freyd. Published: 1920. Purpose: to measure a pupil's ability for journalism. Range: first-year college. Time to give: $1\frac{3}{4}$ to 5 minutes each. Time to score: few minutes. Standardized: tentatively. Any time during first year of journalism course in college.

This is a series of 9 tests, each consisting of exercises or problems to be answered. A time limit is placed on each test. The tests cover the most essential phases of journalism. For example, test one gives a number of statements concerning a fire in a city. The student is to pick out the most important statements in the test for a story for a newspaper in the city where the fire occurred. One series of tests is needed for each pupil to be tested. Directions for giving and scoring are available.

Publisher: Professor Max Freyd, University of Pennsylvania, Philadelphia, Pa.

Price: the test is out of print.

Freyd's Test of Journalistic Aptitude. By Dr. Max Freyd, Department of Psychology, University of Pennsylvania, Philadelphia, Pa. Published: 1920. Range: first year of college. Time to give: about 45 minutes. Time to score: 4 to 5 minutes. Not standardized. Out of print and no information available.

KINDERGARTEN

Scale for Judging Kindergarten Drawing. By Florence Williams. Published: 1922. Purpose: to measure ability to draw. Range: kindergarten and grade 1. Time to give: not "time limit" test. Time to score: variable. Standardized: any time of year.

The scale is composed of 5 specimens of drawing. The pupils were asked to draw turkeys at Thanksgiving time. They were given definite directions for a period of time. One week later they were asked to draw a turkey. From 206 drawings the scale was made. Two of the specimens are not recognizable as turkeys. The scale may be used in judging other bird forms or animal forms. One scale is needed for each teacher.

Publishers: Department of Art Education, School of Education, Chicago University, Chicago, Ill.

Price: 5 cents each.

LANGUAGE

Boston Test in Accurate Copying. By Boston Public Schools. Published: 1916. Purpose: to determine ability to copy printed matter. Range: eighth grade. Time to give: 15 minutes. Time to score: no information. Average errors per pupil are given. Standardized: June scores.

The test consists of a selection to be copied by the pupils. The pupils should be unfamiliar with the selection. The following errors were to be noted: spelling, capitalization, punctuation, undotted "i's", uncrossed "t's", omitted words, wrong words used, and misplaced words. Out of print.

Charters' Diagnostic Language Tests. By W. W. Charters. Published: 1918; revised, 1922. Purpose: diagnostic. Range: grades 2 to 12. Time to give: not "time limit" test. Time to score: 2 minutes each test. Standardized: mid-year standards.

There are 5 separate tests: Miscellaneous A and B, Verbs A and B, and Pronouns. All are similar in construction. Each contains 40 sentences, some correct, some incorrect. If the sentence is correct, a

cross is to be made on the dotted line below it; if incorrect, the correct word is to be written under the incorrect word. One test is needed for each pupil to be tested. A key for scoring tentative standards as well as directions for giving are furnished with the tests.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: 80 cents per 100 each part. Sample sets, 10 cents.

Charters' Diagnostic Language and Grammar Tests. By W. W. Charters.

Published: in its present form, 1922. Purpose: diagnostic. Range: grades 7 and 8. Time to give: not "time limit" test. Time to score: no information. Standardized: May scores.

The test is composed of questions on the use of verbs and pronouns. Sentences are given, some of which are correct, others incorrect. If the sentence is correct, a cross is to be made under it; if it is incorrect, the incorrect word is corrected by writing the correct word under it. The reason for the correction is to be written at the right of the sentence in a space left for that purpose. A miscellaneous test is devised which gives exercises in many different phases of sentence construction. One test is needed for each pupil to be tested.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: \$1.50 per 100. Sample sets, 10 cents.

Green's Organization Tests: Forms A and B. Harry A. Green. Published: 1920. Purpose: to measure certain phases of linguistic organization in sentences. Range: grades 3 to 12. Time to give: 5 minutes. Time to score: short. Standardized: no information as to time of year for which standards are made.

The test is made up of 2 equivalent forms, A and B. Each form is composed of 10 exercises arranged in ascending order of difficulty with values ranging from .03 to 6.4. Each exercise consists of groups of words to be arranged into sentences. The groups are numbered. The pupils are to arrange the numbers in the order in which they appear when the sentences are in correct order. One test is needed for each pupil to be tested.

Publisher: Harry A. Green, University of Iowa, Iowa City, Iowa.

Price: no information.

Completion Exercises, Alpha and Beta. By Truman L. Kelley. Published: 1917. Purpose: to measure ability to complete sentences. Range: grades 2 to 12. Also college graduates. Time to give: varies from 20 minutes to $\frac{3}{4}$ hour. Time to score: no information. Standardized: no information as to time of year for which standards are made.

The tests are composed of 2 equivalent exercises, Alpha and Beta. Each exercise is composed of 40 mutilated sentences to be completed. One test is needed for each pupil to be tested.

Publisher: Teachers College, Columbia University, New York City.

Price: 75 cents. The manual for this scale is Trabue's "Key for Completion-Test Language Scales", 1922 edition.

Thompson's Minimum Essentials in Language. By Thomas E. Thompson. Published: 1912. Purpose: to measure speed and accuracy and to furnish drill in the use of language. Primarily for drill on essentials. Range: grades 3 to 8. Time to give: no information. Time to score: no information. Standardized: no.

There are over 40 different tests. They are devices for teaching as well as tests. The odd-numbered sheets contain quick, oral drill exercises. The even-numbered sheets contain quick, written tests made by rearranging the material used in the oral drill exercises. One set of tests is needed for each pupil.

Publisher: Ginn and Co., 2301 Prairie Ave., Chicago, Ill.

Price: 44 cents per 100, \$1.60 per 500.

Trabue-Kelley Completion Exercises, Alpha and Beta. By M. R. Trabue and T. L. Kelley. Described under Trabue's Completion Tests (Language).

Completion-Test Language Scales. By M. R. Trabue. Published: 1919. Purpose: to measure the language ability of an individual, a class, or a group. Range: grades 2 to 12. Time to give: 5 to 7 minutes each. Time to score: brief. Standardized: mid-year scores. Comparative scores for all grades are given.

The scales are made up of 11 tests: Scales B, C, D, E, F, J, K, L, M, and Alpha and Beta. Scales B, C, D, E, F are equivalent and may be used in grades 2 to 12. "If time is limited, Scales D and E should be used as a test, and Scales B and C to measure improvement." Scales J and K are equivalent and are intended primarily to measure adults and high school classes. Scales L and M are equivalent and are especially adapted to high school use.

Scales Alpha and Beta are equivalent and are composed of 40 sentences, each selected from the above scales. They are often used to test the language ability of individuals. One copy of each scale to be used is needed for each pupil to be tested.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: Scales B, C, D, E, F, J, K, L, each 50 cents per 100; Scales Alpha and Beta each, \$1.25 per 100. Sample sets of each scale, 10 cents, postpaid. Key containing all scoring devices for all scales, 90 cents. Key for scales Alpha and Beta, 20 cents. One record sheet for each 50 pupils, 3 cents.

Wilson Language Error Test. By Professor G. M. Wilson, School of Education, Boston University, Boston, Mass. Published: 1923. Range: grades 3 to 12. Purpose: attempts to measure pupil's ability to detect common language errors. Time to give: 5 to 15 minutes. Time to score: about 2 minutes each. Standardized: May standards.

This is a group test which may be used to test at the same time as many pupils as can be assembled in a room. It consists of 3 short

stories, each containing 28 language errors which research studies have shown to be the most common errors. The story form eliminates the artificiality of the common type of test (in which both the error and its correct form are given) and also introduces the element of interest. The correcting of a story is done by the pupil just as tho he were correcting the first draft of his own composition. He crosses out the incorrect words or phrases and writes in the correct ones.

Publisher: Professor G. M. Wilson, School of Education, Boston University, Boston, Mass.; also World Book Co., Chicago, Ill.

Price: specimen set, 15 cents; package of 25, \$1.25.

LATIN

Brown's Latin Tests. By H. A. Brown. Published: 1915. Purpose: to measure efficiency in Latin. Range: grades 9 to 12. Time to give: 30 minutes. Time to score: 30 seconds. Standardized: June scores.

There are 5 separate tests: (1,2) Latin sentence Tests A and B, (3) Latin grammar test, (4) Connected Latin test, (5) Vocabulary test. Sentence Test A is composed of 30 sentences, and Test B is composed of 20 sentences. The sentences are weighted, and the value of each is written at the left of the sentence. The pupil is directed to translate as many sentences as he can. If only a part can be translated, that part is to be written. The grammar test is composed of 20 exercises. The pupil is to give the name of the constructions of the Latin words in Italics, also the reason for the use of the construction and the rule governing it. The connected Latin test is composed of an episode from Caesar's Gallic War to be translated. The vocabulary test consists of 50 words. One test of each used is needed for each pupil to be tested. Instructions are printed on the tests.

Publisher: The Parker Co., Madison, Wis.

Price: Latin grammar test, 75 cents per 100; Latin vocabulary test, 75 cents per 100; Latin sentence Test A, \$1.25 per 100; Latin sentence Test B, \$1.25 per 100; Latin connected test, \$1.25 per 100.

Carr's English Vocabulary Test, Form C. By W. L. Carr, Oberlin College, Oberlin, Ohio. This test is listed under Reading.

Godsey Diagnostic Latin Composition Test, Forms 1 and 2. By Edith Godsey. Published: Form 1, May, 1922; Form 2, April, 1923. Range: second to eighth semester of high school Latin. Time to give: 30 minutes. Time to score: short. Standardized: tentative norms have been established for Form 1, and Form 2 has been equated with Form 1. Standardized in May and June for pupils completing 2, 3, 4, 5, 6, 7, and 8 semesters.

The test is composed of 3 sections of exercises, each with rules governing each correction. Each English sentence has a Latin sentence under it, which is a correct translation, except that it contains a phrase expressed in 4 ways, one of which is correct. A line is to be drawn

under the phrase that is correct. At the right of the exercise are 4 numbers referring to the 4 rules given below. The pupil is to draw a circle around the number corresponding to the number of the rule that governs the correction. One test is needed for each pupil to be tested. Directions for use are available.

Publishers: W. L. Carr, Oberlin College, Oberlin, Ohio, or American Classical League, care Dr. Mason D. Gray, East High School, Rochester, N.Y.

Price: 100 tests, including directions, \$1.

Hanus' Latin Tests. Paul H. Hanus. Published: 1920. Purpose: to measure the growth of power in 3 elements of Latin—vocabulary, translation, and grammar. Range: grades 9 to 12. Time to give: 30 to 40 minutes. Time to score: no information. Not standardized.

There are 3 tests: vocabulary, translation, and grammar. The vocabulary test is made up of 3 parts. Each consists of 50 Latin words. The translation test consists of 10 Latin sentences to be translated into English. The grammar test consists of 5 nouns and 5 verbs. The pupil is to give the case and verb forms and reasons for using them. The tests are printed only in Hanus' "School Administration and School Reports", published by Houghton Mifflin Co.

Henmon's Latin Tests. By V. A. C. Henmon. Published: 1917. Purpose: to measure ability in vocabulary and sentence construction. Range: for the four years of high school work. Time to give: 8 minutes for vocabulary, 12 minutes for sentence tests. Time to score: 4 to 5 minutes. Standardized: June scores.

The tests are composed of vocabulary and sentence tests. There are 5 vocabulary tests: A, B, C, D, and X. Tests A, B, C, and D are composed of 50 words each. Each word is weighted, values ranging from .4 to 4.7. Test X is composed of 25 words of equal value. It is designed for research purposes and surveys. Of the 4 sentence tests now used, 1 and 2 are of equal difficulty, and are suited for all 4 years. Sentence test 3 is too difficult to be satisfactory except in the third and fourth years. One test is needed for each pupil tested. Instructions for giving and scoring, as well as standards, are available.

Publisher: World Book Co., Yonkers-on-Hudson, N.Y.

Price: Tests 1, 2, 3, 4, and X, per package of 25 of any one test, including 1 instruction and 2 record sheets and standard scores, 50 cents net. Sample set, 1 of each of the 5 tests, 1 direction and 1 record sheet, 10 cents.

Kansas Derivative Latin Tests. By W. L. Holtz and Edith Godsey. Published: 1920. Purpose: to measure transference of training, effect of study of Latin upon knowledge of English. Range: high school. Time to give: 3 to 25 minutes for different sets. Time to score: 1 to 5 minutes. Standardized: first tests at the end of the first semester of Latin; second tests, end of second year of Latin.

There are 4 separate tests: A; B, Form 1; C, Form 1; D, Form 1. Tests A and B are Latin derivative tests. Test A is made up of 5

Latin verbs. The pupil is to write, in the space below each, all the derivations he can. Prefixes may be used. Test B, Form 1, consists of 20 English words and 50 Latin words. Each English word is derived from some Latin word in the list. The pupil is to find the Latin word and give it the same number as its English derivative. Tests C and D are Latin teaching tests and may be used with both Latin and non-Latin students. Test C is made up of 20 English words to be defined and used in sentences. Test B is made up of 50 English words, some of which are spelled incorrectly. The pupil is to make any correction that should be made. Directions for giving are printed on the tests. One set of tests is needed for each pupil tested.

Publisher: Bureau of Educational Measurements and Standards, Kansas State Normal School, Emporia, Kan.

Price: 50 cents per 100.

Lohr-Latshaw Latin Form Test. Published: November, 1918, in High School Journal, Chapel Hill, N.C. Range: high school Latin classes. Time to give: not "time limit" test. Probably requires about 15 minutes for pupil to complete as much of the test as he can. Time to score: about 1 test per minute. Standardized: no information. Publisher: University of North Carolina, Chapel Hill, N.C. Price: Probably 60 cents when available for general distribution.

Pressey Test in Latin Syntax. By L. W. Pressey. Published: 1922. Purpose: diagnostic. Range: second to eighth semesters of high school. Time to give: 15 minutes. Time to score: 2 minutes with stencil. Standardized: May and June scores.

The test is composed of 33 exercises. Each exercise contains an English sentence and 4 Latin translations, 3 of which are incorrect. The pupil is to underline the Latin sentence that is correct. Complete directions for giving and scoring with suggestive remedial measures are available. One test is needed for each pupil to be tested.

Publishers: Dr. Mason D. Gray, East High School, Rochester, N.Y. Soon to be republished by Public School Publishing Co., Bloomington, Ill.

Price: \$1 per 100.

Starch's Latin Tests. By Daniel Starch. Published: 1916. Purpose: to measure pupil's Latin vocabulary and ability to read and translate Latin sentences. Range: no information. Time to give: no information. Time to score: no information. Standardized: no information as to time of year for which standards are made.

The tests are made up of a vocabulary test and a reading test. The vocabulary test is composed of two sets of 100 words each. The reading "test is composed of a series of sentences arranged approximately in the order of difficulty." One test is needed for each pupil to be tested.

Publisher: University Coöperative Co., Madison, Wis.

Price: out of print.

Starch-Watters' Latin Test (same as Starch's Latin Test). By Daniel Starch and J. M. Watters. Published: 1918. Purpose: to measure pupil's ability in Latin vocabulary and translation. Range: first, second, third, and fourth years in Latin. Time to give: 45 minutes. Time to score: 5 to 10 minutes. Standardized: tentatively, June standards.

The Latin Test, Series A, is made up of a vocabulary test and a translation test for each of the 4 years of high school. The vocabulary test is composed of 100 words selected by choosing every twelfth word from Lodge's "The Vocabulary of High School Latin". Space is left at the right of each word for the pupil to write the meaning. The translation tests were made by selecting sentences at regular intervals from texts for each year. One test is needed for each pupil tested. Standards and directions for use are printed on the tests.

Publisher: University Coöperative Co., 508 State St., Madison, Wis.
Price: 2 cents per sheet.

Tyler-Pressey Test in Latin Verb Forms. By Caroline Tyler and S. L. Pressey. Published: 1922. Purpose: diagnostic. Range: at the end of any semester of Latin. Time to give: 15 minutes. Time to score: 2 minutes with stencil. Standardized: January and June scores.

The test is made up of 32 Latin verb forms. Each verb is followed by 4 translations, 3 of which are incorrect. The pupil is to underline the one he thinks is correct. A stencil has been provided for scoring the tests. When the stencil is placed on the test only the correct forms appear thru the perforations. Directions for giving are printed on the tests. One test is needed for each pupil to be tested.

Publishers: Dr. Mason D. Gray, East High School, Rochester, N.Y.
Soon to be published by Public School Publishing Co., Bloomington, Ill.
Price: \$1 per 100.

Ullman-Kirby Latin Composition Test. By B. L. Ullman and T. J. Kirby. Published: February, 1922. Purpose: to measure comprehension in Latin. Range: all high school pupils after the end of the second semester's work. Time to give: 30 minutes. Time to score: about 1 hour for 30 pupils. Standardized: mid-year scores.

The test is composed of 10 paragraphs with questions on each. Pupils are permitted to read a paragraph as many times as they desire, while answering the questions. If all papers are not in at the end of 30 minutes they should be taken up by the examiner. The test may be given at the end of each semester after the second. One test is needed by each pupil to be tested.

Publisher: Bureau of Educational Reference and Research, University of Michigan, Ann Arbor, Mich.

Price: 100 tests containing complete directions, \$1.

Wentworth's Latin Test. By Mary M. Wentworth. Published: October, 1919. Purpose: to measure pupil's ability to remember Latin words and associate them with English derivatives. Range: secondary

schools, grades 9 and 10. Time to give: Test I, $2\frac{1}{2}$ minutes; Test II, 5 minutes. Time to score: about 15 minutes. Standardized: November scores.

There are 2 separate tests. Test 1 is composed of 100 English words, some of which are derived from Latin and some are not. The words are selected in such a way that pupils must decide from the meaning rather than from the spelling whether or not they are derived from Latin. The words "yes" and "no" are written after each word. The pupil answers by underlining "yes" after all Latin derivatives. Test 2 is a vocabulary test. One hundred English words are given. Space is left at the right for its Latin equivalent. The pupil is to write the Latin equivalent. One test is needed for each pupil to be tested. Standards and directions for giving and scoring are available.

Publisher: Division of Educational Research, City School District, Los Angeles, Calif.

Price: not for sale. Apply to publisher. This test is in process of revision.

MATHEMATICS

Rogers' Test for Diagnosing Mathematical Ability. By Agnes L. Rogers.

Published: no information. Purpose: diagnostic. Range: grade 9. Time to give: about $1\frac{1}{2}$ hours. Time to score: no information. Standardized: no information as to time for which standards are made.

There are 6 tests as follows: (1) Superposition, (2) Algebra computation, (3) Interpolation, (4) Geometry, (5) Mixed relations, (6) Trabue language completion Scales J and L. "The tests are of such a nature as to enable a teacher to form an adequate estimate of the pupil's mathematical capacity and the likelihood of success in future mathematical work. They measure original ability rather than the effect of training." One set of tests is needed for each pupil to be tested.

Publishers: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: \$9 per 100; sample copy, 10 cents. Examiner's manual, 65 cents.

MISCELLANEOUS

Chapman's Classroom Products Survey Tests. By J. C. Chapman, Philadelphia, Pa. Published: in experimental form, 1921. Range: grades 5 to 8. Time to give: 85 to 90 minutes. Time to score: 2 minutes. Standardized: in percentiles, mid-year.

This concise test affords means of measuring achievement in 4 factors, by which the success of elementary education can be gauged, namely: the fundamental processes in integers, fractions, and decimals; application of those fundamentals to quantitative situations in life; read-

ing with understanding, as the reading progresses; and studying a selection with a view to answering questions concerning its content.

Publisher: J. B. Lippincott Co., Washington Square, Philadelphia, Pa.

Price: 100 copies of tests complete with norms and directions to teachers and individual record blanks, 1 key sheet (no other material required), \$3.50.

Courtis Standard Research Tests: Series X, Control. By S. A. Courtis.

Published: no information. Purpose: to measure ability to follow directions. Range: elementary, secondary, and college. Time to give: no information. Time to score: no information. Standardized: no information as to time of year for which standards are made.

The test is composed of 49 problems to be solved. The problems are simple if the directions are understood. They are to be solved in order as numbered. The problems are not numbered in the ordinary way but diagonally across the page, beginning in the lower left-hand corner and finishing in the right-hand corner.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.

Price: out of print.

The Guhin Auto-Flash Card Machine. By M. M. Guhin. Published: no information. Purpose: in primary grades it can be used to help children gain automatic control over the fundamental processes and forms on which nearly all primary work is based. In intermediate and grammar grades it can be used to fix permanently in mind, independent of the associative process, a few scores of facts in history, civics, geography, etc., which serve as a nucleus of ever-increasing knowledge, and develop the child's consciousness of power. In Americanization evening schools for adults, the Auto-Flash Card Machine enables the teacher to give drill exercises on sounds, phonograms, difficult constructions, facts in history, civics, etc., in an interesting, entertaining way, thus eliminating "drill for drill's sake", which is especially trying to adults.

The process or drill fact to be mastered is printed in large display type on a card. Approximately 50 cards constitute a set. Invariably a score or more of the drill facts are so easy that a beginning class can easily master them, e.g., the "zero and 1" combinations in either addition or multiplication. The cards on which drill facts are printed are placed on the machine, which automatically drops the cards in regular order. One card at a time is added to the drill as the drill fact involved is presented until all the processes or facts included in a set are mastered.

The machine holds each card before the child or class for a period of from 1 to 3 seconds. The card then drops and another takes its place. The child, or the class, calls the answer to each card while exposed to view.

The following sets are already prepared: (1) Number Combinations, (2) Step II Addition, (3) Language Cards, (4) Civics Cards, (5) History Cards, (6) Blank Cards.

Publisher: Hub City School Supply Co., Aberdeen, S.D.

Price: machine with one set of cards, \$20. Extra sets of cards, \$1 each.

Professional Test for Elementary School Teachers. By R. H. Franzen and F. B. Knight. Published: June, 1922. Range: elementary teachers. Time to give: 1 to 1½ hours. Time to score: 7 minutes. Standardized: no definite time of standardization as it measures a constant function.

Publisher: F. B. Knight, University of Iowa, Iowa City, Ia.

Price: 15 cents each; \$9 per 100.

Stanford Achievement Test. By Truman L. Kelley, G. M. Ruch, and Lewis M. Terman. Published: 1922. Purpose: "A battery of achievement tests designed to measure very thoroly the knowledge and ability of pupils in the school subjects in grades 2 to 8." Range: grades 2 to 8. Time to give: primary, grades 2, 3, 73 minutes; advanced, grades 4 to 8, 148 minutes. Time to score: 10 to 20 minutes. Standardized: June scores. But all tests have age norms for interpretation, no matter at what time given. All norms to nearest month.

Primary tests in arithmetic, reading, and spelling are devised for grades 2 and 3. Advanced tests in arithmetic, reading, and spelling, science information, history, and literature are prepared for grades 4 to 8.

Publisher: World Book Co., Chicago, Ill.

Price: Specimen sets, 50 cents; advanced examination, 8 cents each; primary examination, 6 cents each, including directions and score key.

Lull's Project-Problem Method of Learning. By H. G. Lull. Published: 1920.

This is a teaching device. It is made up of 5 parts, as follows:

- (1) Pupil activities in the recitation period,
- (2) Teacher activity in the recitation period,
- (3) Pupil activities in the supervised study period,
- (4) Teacher activities in the supervised study period,
- (5) Drill projects.

Publisher: H. G. Lull, Kansas State Normal School, Emporia, Kan.

Price: no information.

Test of General Information with Sociologically Determined Weightings.

By C. C. Peters, Ohio Wesleyan University, Delaware, Ohio. Published: in mimeographed form only at present. Range: grade 4 to university. Time to give: Form 1, 40 minutes; Form 2, 10 minutes. Time to score: Form 1, 6½ minutes; Form 2, 1½ minutes. Not standardized at present, but will be before it is offered for sale.

An Educational Survey Test. By Rudolf Pintner and Florence Fitzgerald. See Pintner's Educational Survey and Non-Language tests below.

Pintner's Educational Survey and Non-Language Test. By Rudolf Pintner. Published: 1918. Purpose: diagnostic, to use educational and mental tests in combination to determine the amount of educational

attainment to be expected of pupils of varying degrees of mental ability. The author thinks the time has come to use the combination of intelligence and educational tests to diagnose the school situation. Range: grades 3 to 8. Time to give: 25½ minutes of working time for both tests. Time to score: 10 to 15 minutes. Standardized: both tests standardized on same group of children, mid-year standards.

There are 8 separate tests, as follows: (1) Words, (2) Arithmetic, (3) Reading—Kelley, (4) Reading—Thorndike, (5) Trabue, (6) Grammar, (7) Geography, (8) History. Time for each test ranges from 1½ to 5 minutes. The mental test consists of 6 separate tests. The mental tests are non-language tests and may be given to non-English speaking children. Tho the tests are intended to be given together, they may be given separately. One test for each pupil to be tested. The manual of directions gives complete instructions for use.

Publishers: College Book Store, Columbus, Ohio.

Price: The Pintner Mental Test, per 100.....	\$4.00
The Pintner Educational Test, per 100.....	4.00
Manual of Directions.....	.50
Set of stencils for correcting tests.....	.50
Sample Set, including Manual Stencils, and 5 copies of each test blank	1.40

Information on Sports and Amusements. By S. L. and L. W. Pressey.

Published: 1922. Range: grades 6 to 12. Purpose: to test knowledge of sports and amusements. Time to give: 45 minutes. Time to score: 4 minutes. No information as to standardization.

This test consists of 27 groups of 5 questions each, dealing with certain phrases, terms, etc., of various sports and amusements. The pupil is to underline the correct answer among 5 given after each question. At the end, 32 sports, or amusements, are listed, and the pupil is to underline each one with which he is familiar. One folder for each pupil.

Publisher: Ohio State University, Columbus, Ohio.

Price: not sold, but small quantities may be procured for experimental purposes.

Interest Questionnaire. By S. L. and L. W. Pressey. Published: 1922.

Purpose: to determine the principal interests of the one being tested.

Range: grades 5 to 12. Time to give: 45 minutes. Time to score: 4 minutes. Tentative standards.

This is a folder of 5 divisions or parts. Part I is a long list of "Games and amusements". The pupil is to underline every one he ever participated in and draw a line around the 5 most enjoyed. Part II deals in the same way with "Accomplishments". Part III, A, is a list of magazines of which those read are to be underlined and the 5 most enjoyed to be encircled. Part III, B, deals in the same way with "Books". Part IV is a list of names of people. Those admired are to be underlined, the 5 most admired to be encircled. Part V is a list of

occupations. The pupil is to underline every one he ever thought he might like and put a circle around the 5 he would like best. One folder is needed for each pupil.

Publishers: Ohio State University, Psychology Department, Columbus, Ohio.

Price: no charge, but furnished in small quantities for experimental purposes.

Achievement Tests Used by the Indiana Education Survey Commission.

These tests consist of: Thorndike-McCall Reading Scale; Woody Arithmetic Scales, Series B; Van Wagenen American History Scales; and a spelling test. For description, see these various tests as described under their respective subjects. Out of print as achievement tests.

Tests of Aesthetic Appreciation. By E. L. Thorndike. Published: 1916.

Purpose: to measure aesthetic appreciation. Range: no information.

Time to give: no information. Time to score: no information.

Standardized: no information as to time of year for which standards are made.

The tests are composed of a series of 7 designs. These consist of rectangles, crosses, lines, etc., arranged in different ways to give various effects. Also a test of "Appreciation of Quality of a Line of Poetry Written to Complete a Couplet, the First Line Being Given". Out of print.

Citizenship. Upton-Chassell Scale for Measuring Habits of Good Citizenship. By Siegfried Marie Upton and Clara F. and Laura M. Chassell. Published: 1918; revised, 1922. Purpose: to measure progress in forming attitudes and habits of good citizenship. Time to give: no information. Time to score: no information. Range: elementary school. Standardized: no.

This includes Scales A-H. The scales resemble in some respects a score card. Each scale consists of 24 items or points for consideration in rating a pupil. The items are weighted with values ranging from 0 to 3. Zero means almost no habit or attainment in the item indicated, while 3 means an almost perfect attainment. Examples of items: Scale A, Item 2, "Does not run in halls". Item 20, "Approaches difficult tasks resolutely". The scales are especially suggestive for the teaching of citizenship. One copy of each scale used is needed for each pupil to be tested. Teachers College Record for January, 1922, describes the scales.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: 45 cents per 100 scales. For examiner, one copy of bulletin. For pupil, one copy or more of the Scales C, D, G, and H are now available at 50 cents per 100.

* This is a bulletin entitled "A Scale for Measuring the Importance of Habits of Good Citizenship: With a Description of Its Use in a New Report Card at the Horace Mann School".

The Function of Ideals in Education. By Paul E. Voelker. Published: 1921. Purpose: to test effect on actual conduct of the teaching of ideals. 150 boys tested for trustworthiness, 2 groups brought under teaching of a Boy Scout leader, the entire group re-tested with result that the boys who had been in the Boy Scout troop tested 22 per cent higher than the others. The tests are described in detail in the book. Range: children of ages 10 to 17. Time to give: in 2 hours 2 examiners can test 12 to 15 subjects. Time to score: for group of 10, 1 hour. Not standardized.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: price of book containing these tests, cloth, \$1.80; paper, \$1.35.

MODERN FOREIGN LANGUAGE

Handschin's Predetermination Tests. By C. H. Handschin. Published: mimeographed copies only. Purpose: to classify pupils according to linguistic ability. Time to give: written test, 5 minutes; oral, 4 minutes for each pupil. Time to score: no information. Standardized: no information.

There are 4 separate predetermination tests using Esperanto, 2 written and 2 oral. The written tests are "seeing-writing" and "hearing-writing". Sentences are placed on the board and exposed for one minute, then erased, and the pupils are to reproduce them in writing. The oral tests are individual. Each pupil is given a four-minute test in hearing-speaking and seeing-speaking. The answers are weighted. Complete directions for giving, scoring, and recording are available.

Procurable from Bureau of Education, Washington, D.C.

Price: no information.

Wilkins' Prognosis Test in Modern Foreign Language. By Laurence A. Wilkins. Copyrighted: 1920. Purpose: to measure the ability of pupils to succeed in the study of foreign language. Range: secondary schools and colleges. Time to give: collective tests, 23 5/6 minutes; individual tests, for 25-30 students, 45 minutes. Standardized: yes.

The test is made up of Series A and B. Series A is composed of 4 separate tests: (1) visual-motor (seeing and writing), (2) aural-motor (hearing and writing), (3) memory, (4) grammar concepts. Series B is composed of 2 individual tests: Test 5, visual-oral (seeing and speaking in English), Test 6, aural-oral (hearing and speaking). The prognostic test is to be given the first day of school. If the pupil scores less than 60 per cent of the 360 credit points he is not likely to be able to take modern language work profitably. However, pupils that fall low may be permitted to enter a separate class that goes more slowly than the regular class and try out for one month and then take the elimination

test. The booklet containing the prognostic test contains the elimination test. Complete instructions for use are given in the manual of directions.

Publishers: World Book Co., Yonkers-on-Hudson, N.Y.

Price: \$1.60 net per package of 25 booklets, including manual of directions. Specimen sets (1 test and 1 manual), 10 cents postpaid.

MUSIC

Beach's Standardized Music Tests. By Frank A. Beach, Director of School of Music and Professor of Public School Music, Kansas State Normal School, with the coöperation of the Bureau of Educational Measurements. Published: 1920. Purpose: to measure achievement in music. Range: grades 2 to 12. Time to give: 90 minutes. Time to score: 2 minutes (with stencils). Standardized: end-of-year scores.

The tests are made up of 62 questions on 5 different phases of music as follows: (1) Symbols; (2) Ear training; (3) Eye training; (4) Ear and eye training, correlation between notation and melody; (5) Sight reading; (6) Writing; (7) Visualization; (8) Sight singing. Standards are now available for all grades. One test is needed for each pupil to be tested. A manual containing complete directions is available. A revision of this test will be made soon. It will be shortened and one or two features added.

Publisher: Bureau of Educational Measurements and Standards, Emporia, Kan.

Price: \$2 net for 50 copies. Sample set and manual of instructions, 35 cents net, containing manual, standard sheet, and test sheet, 50 cents, postpaid.

Recognition of Characteristic Rhythms. By Harriet Petry and Marie Rasey. Published: 1922. Purpose: to measure pupil's ability to interpret life's activities and moods in terms of music. Range: grades 4 to 12. Time to give: no information. Time to score: 20 minutes. Standardized: yes; no set time of year for standards.

The tests are composed of 2 separate tests, I and II. The first expresses characteristic activities, and the second, moods of thought. Test I tells a story of "John's Holiday". Music is played and the pupil is asked questions about John's experiences. He is to underline the questions which the music tells how he traveled, what he saw, etc. Test II tells what the music says concerning John's thoughts as he sits thinking over his day's experiences. Directions for administering are available. One test is needed for each pupil tested.

Publishers: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.

Price, \$1.80 for set of 40 tests; \$2.50 for set of 80 tests; a complete copy, including directions for giving and score key, 80 cents.

Measures of Musical Talent. By Carl E. Seashore. Published: off and on for years. Purpose: prognostic. Range: grades 5 to 8. Time

to give: group tests, 3 class periods or less. Time to score: 10 minutes, approximately, if skilled. Standardized: yes; standards not seasonal.

The survey is made by using phonograph records designed for the purpose. The test is based on 5 measures, as follows: (1) the sense of pitch, (2) the sense of intensity, (3) the sense of time, (4) the sense of consonance, (5) the tonal memory. A complete survey consists of 3 steps. The first is to make the 5 basic tests, the second is to make further intensive testings of the case selected, and the third is to do follow-up work. The measures on which the tests are based are weighted. The sense of pitch is regarded as being of greatest value. Complete directions for administering the tests are available.

Publishers: Silver, Burdett, and Co., Boston, Mass., and Iowa University, Iowa City, Iowa.

Price: Manual, 25 cents.

PHYSICAL TRAINING

Athletic Badge Tests for Boys and Girls. Published: boys, 1913, revised, 1922; girls, 1916, revised, 1922. Purpose: to give physical training for boys and girls. Time to give: 15 minutes. Less if tests are given in groups. Time to score: 2 to 3 months. Standardized: all seasons.

The tests have been adopted and standardized by the Playground and Recreation Association of America. The boys' test is made up of a series of 3 tests. Twelve-year-old boys should be able to attain the standards set for the first test. Boys in the elementary school, 13 years and over, should be able to attain the standards set for the second test, and high school boys should be able to reach standards set for third test. The tests are standardized in 3 events for each test. The tests are the usual field sports such as running, jumping, etc.

The tests for the girls are similar in arrangement to those of the boys and are composed of volley-ball serving, basket-ball goal throwing, balancing, etc. Pupils who reach the standards set are entitled to receive a badge designed for test engaged in. One manual of directions is needed for each director.

Publisher: Playground and Recreation Association of America, 1 Madison Ave., New York City.

Price: no charge for single copies. In quantities of 10 or more, 5 cents each, or \$2.50 per 100.

Baldwin's Physical Development Scale. By B. T. Baldwin. Published: 1916. Purpose: to measure physical development. Range: grades 1 to 12. Time to give: 30 minutes. Time to score: 2 minutes. Standardized: yes; winter standards.

The scale is arranged in the form of a score card with the different points of consideration weighted. The scales for boys and girls are made separately. "The norms represent well developed children with

school-medical inspection and physical training. A small child for a given age may be well developed if the coefficients, height, weight, and breathing capacity relationships are normal and approximately those indicated." A graph sheet is furnished with measurements for a normal child arranged in curves. The measures of the child may be plotted and compared with the normal curve. Directions for giving and scoring are available. One card is needed for each pupil to be tested.

Publishers: Extension Division, University of Iowa, Iowa City, Iowa.

Price: Physical Development Scale, 10 cents per set, consisting of a buff card for girls and a white card for boys. The paper measuring scale sells for 60 cents.

Rapeer's Scale for Measuring Physical Education, Health, and Physical Development. By Louis W. Rapeer, Washington, D.C. Published: 1917. Purpose: to measure the results of physical education. Range: all elementary grades. Time to give: 1 hour. Time to score: 10 minutes. Standardized: any-time-of-year scores.

The scale is made up of 5 parts: (1) health scale, (2) physiological efficiency scale, (3) physical development scale, (4) physical ability scale, (5) mental qualities scale. A total of 100 points are given for the 5 scales. The scale may be used as a sort of score card to measure the quality of work done and detect defects that may be remedied. Directions for determining points to be considered under each scale are given.

Publishers: L. W. Rapeer, 20 Jackson Place, Washington, D.C., and Public School Publishing Co., Bloomington, Ill.

Price: This scale has never been printed in separate form. It is contained in Part I of the Sixteenth Year-Book of the National Society for the Study of Education, price of which is \$1, postpaid.

Standards in Physical Training. By Frederick J. Reilley. Published: 1917. Purpose: to measure results in physical training. Range: grades 5 to 8 inclusive. Time to give: no information. Time to score: no information. Standardized: on the basis of age, height, and weight.

The tests are composed of field and indoor events for boys and girls. Standards have been found for more than 15 events. Some of the most common events are running, jumping, basketball throw, serving in tennis, etc. The standards are aids to pupils in judging their own progress. One chart containing standards is needed for each teacher or examiner.

Publishers: D. C. Heath and Co., Chicago, Ill., New York City, and Boston.

Price: 10 cents each. 20 copies, \$1, postpaid.

The Physical Test of a Man. By D. A. Sargent. Published: 1921. Purpose: to measure physical ability. Range: no information. Time to give: no information. Time to score: no information. Standardized: no information.

The test is constructed by considering 3 factors: height jumped, foot-pounds of work done, and amount of energy expended. These points

are found by having the person tested jump upward as high as he can and solve the results by a formula given in the test. The energy index factor is considered by the author to be of most importance. One test is needed by each examiner.

Publishers: School and Society, January 29, 1921. Anyone interested may be able to secure a reprint from School and Society, Lancaster, Pa.

PHYSICS

Balderston's Elementary Physics Test. No information available.

Publishers: Christopher Sower Co., Philadelphia, Pa.

Caldwell's Science Tests (Botany, Chemistry, Physics, Zoölogy). See heading General Science.

Camp's Iowa Physics Test. By H. L. Camp. Published: 1920. Purpose: to measure pupil's knowledge of principles in physics and their ability to apply them. Range: first-year physics. Time to give: 40 to 50 minutes. Time to score: about 1 minute. Standardized: on completion of unit.

The test is composed of 3 distinct scales of 11 or 12 questions each. The exercises have been selected so that about half measures "knowledge of fundamental principles" and half "ability to make useful applications of such knowledge." The standards were determined by giving the exercises to 3,500 boys and girls in 129 Iowa high schools. The scales derived are: (1) Mechanics, (2) Heat, (3) Electricity and magnetism. One test of each given is needed for each pupil to be tested. Directions for giving and scoring are available.

Publisher: Extension Division, University of Iowa, Iowa City, Iowa.

Price: \$1.25 per 100, complete with directions.

A Test in Electricity and Magnetism, Sound, and Light. By J. Crosby Chapman. Published: December, 1919. Purpose: informational. Range: high school physics classes. Time to give: approximately 10 minutes. Time to score: 1 minute. Standardized: partly for end of course.

The test is composed of 30 questions on electricity and magnetism, sound, and light. The questions were evaluated and arranged in order of difficulty.

Publisher: J. C. Chapman, Yale University, New Haven, Conn.

Price: 25 cents.

New Types of High School Physics Tests for Instructional Purposes. By Earl R. Glenn and E. L. Obourn. Published: 1919, 1920; revised, 1922-23. Purpose: a teaching device as well as tests. Range: high school physics. Time to give: 10 to 40 minutes. Time to score: about 10 minutes, scoring done by the class. Standardized: tentative standards.

The tests are made up of 27 tests "designed to cover all of the topics usually taught during the high school physics course". Test 1, for

example, is on the measurement of length, mass, time, and density. It is made up of 30 questions. Each question is followed by 4 answers, 3 of which are incorrect. The pupil answers by drawing a line under the correct word and writes its number in the parenthesis at the right of the question. One set of tests is needed for each pupil to be tested.

Publishers: Earl R. Glenn and E. S. Obourn, 425 West One Hundred and Twenty-third St., New York City.

Price: no price quoted. Tests have been supplied free of charge to coöperating high schools.

Jones' Union Science Test in Physics. By Franklin T. Jones. Published: 1918. Purpose: for practice and comparison. Range: high school grades 11 and 12. Time to give: 21 tests with time ranging from $2\frac{1}{2}$ to 12 minutes per test. Time to score: brief. Standardized: "both yes and no", some standards useful at any time of school year.

The tests are made up of 14 tests on heat, 3 on electricity, 2 on sound, and 2 on light. Each test consists of from 5 to 12 exercises. Directions for giving and scoring are available. One test is needed for each pupil to be tested.

Publishers: University Supply and Book Co., 10109 Wilber Ave., Cleveland, Ohio.

Price: in sets of 27 tests, 25 cents per set.

The Place of Numerical Problems in High School Physics. By D. P. Randall. No information obtainable.

Randall, Chapman, and Sutton's Test in Mechanics. By D. P. Randall and others. No information obtainable.

Starch's Physics Test. By Daniel Starch. Published: 1916. Purpose: information test. Range: 1 year of physics. Time to give: 15 to 20 minutes. Time to score: about 5 minutes. Standardized: no information as to time of year standards were made.

The test is composed of 75 mutilated statements on mechanics, heat, sound, light, and magnetism and electricity. If the spaces are properly filled, the statement will be correct. Standard scores are given on each division of subject-matter. Directions for giving and scoring are printed on the tests. One test is needed for each pupil to be tested.

Publishers: University Coöperative Co., 508 State St., Madison, Wis.

Price: 2 cents per sheet.

Thurstone's Physics Test. By L. L. Thurstone. Published: copyrighted, 1919, by Carnegie Institute of Technology; copyrighted, 1922, by World Book Co. Purpose: no information given. Range: high school seniors and college freshmen. Time to give: 30 minutes. Time to score: no information given. Standardized: yes.

Description: See Thurstone's Vocational Guidance Tests.

Publisher: World Book Co., Chicago, Ill.

Price: \$1 per package of 25, including 1 record sheet and key.

Physics Tests. By Harry Whiting Tilton. Published: November, 1922. Purpose: information test. Range: grades 11 and 12 in high school; college freshmen. Time to give: 20 minutes. Time to score: 10 minutes or less. Standardized: partly in process of standardization; standards will be made for June, 1923.

The test is composed of 5 parts, as follows: (1) Measurements, density, and mechanics of fluids; (2) Force and motion; (3) Force and motion; (4) Work and mechanical energy; (5) Thermometry and expansion coefficients. Each part is made up of 35 to 38 exercises. The exercises are composed of mutilated sentences. The pupils are to supply the missing words. If the proper words are supplied the sentences will make correct statements. One test of each part used is needed for each pupil to be tested. Five more parts covering electricity, light, and sound are in preparation.

Publisher: Harry W. Tilton, University of Pittsburgh, School of Education.

Price: Sample package, 10 tests, 50 cents. Sample package, 5 tests, 25 cents. Copies of tests when 25 or more of a test desired, 2 cents each.

PHYSIOLOGY

Grier's Range of Information: Tests in Biology, Physiology, Zoölogy, and Botany. By N. M. Grier. See test as described under Biology.

Diagnostic Physiology Test. By M. C. Olmsted. Published: 1921. Purpose: diagnostic. Range: grades 7 and 8. Time to give: 40 minutes. Time to score: 4 minutes. Standardized: May and December scores.

The test is composed of 2 pages of questions. Page 1 contains 24 incomplete statements with 4 words after each. The pupil is to underline the word that will make the statement complete. Page 2 contains 36 questions similar in construction and arrangement to page 1. Directions for giving and blanks for scoring are available. One test is needed for each pupil to be tested.

Publisher: M. C. Olmsted, Clarkston, Wash.

Price: \$1 per 100.

POETRY

Abbott-Trabue's Exercises in Judging Poetry. By Allen Abbott and M. R. Trabue. Published: 1921. Purpose: to measure poetry appreciation. Range: grades 7 to 12. Time to give: 45 minutes or approximately one class period. Time to score: no information given. Standardized: yes.

The test is made up of 2 parallel series of poems, X and Y. The series are equal in difficulty, and each series consists of 13 sets of

poems of 4 each. The pupil tested reads each set carefully and writes "best" over the poem he thinks best and "worst" over the one he likes least. The original or best version is given as a standard. One test is needed for each pupil to be tested.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: 8 cents per copy, Series X or Y, or \$7.50 per 1,000. Detailed explanations in Teachers College Record for March, 1921, 40 cents.

PUNCTUATION

Clemens' Punctuation Test. By A. H. Clemens, High School, Rochester, Minn. These tests have been abandoned.

Diagnostic Punctuation Test. By S. L. Pressey, Ohio State University, Columbus, Ohio. Published: 1923. Range: grades 7 to 12 and college. Time to give: 10 minutes. Time to score: 1 minute. Standardized: January scores.

Publisher: Psychology Department, Ohio State University, Columbus, Ohio.

Price: 6 cents each, including directions for giving and scoring key.

Starch's Punctuation Scale A. By Daniel Starch. Published: no information. Purpose: to measure ability to punctuate sentences. Range: grades 5 to 12. Time to give: not "time limit" test. Time to score: short. Standardized: June scores.

The scale is made up of 10 steps. Each step is composed of from 1 to 4 sentences to be punctuated. The highest step passed is the pupil's score, unless a step is missed and a higher step passed. Then the score is lowered one step from the highest passed. One scale is needed for each pupil to be tested.

Publishers: University Coöperative Co., 508 State St., Madison, Wis.

Price: 80 cents per 100. Direction sheets, 2 cents each.

RATING SCALES

Tentative Plan for Rating a Teacher on Progress Shown by Her Pupils.

By W. H. Connor. Published: May, 1920. Purpose: to measure teachers by progress of pupils; a scheme for utilizing results of tests in rating teachers, which is just as reliable as the tests used with pupils would indicate. Range: no information. Time to give: no information. Time to score: no information. Standardized: no information.

This rating scheme attempts to shift the basis for rating teachers from the personality, education, etc., of the teacher to the change made in pupils. The items to be considered in the scheme for rating progress of pupils are as follows: deportment, ethical self-control, emotional re-

action, morale, initiative, knowledge and skill, and thinking. "Merely a scheme for summarizing results of standardized tests and certain impressions. Carefully evaluated rather than standardized." Values under each item are indicated by the letters E, D, C, B, A. The values range from 0 to 100. One card is needed for each teacher to be rated.

Publisher: W. H. Connor, principal of Longwood Commerce High School, Cleveland, Ohio.

Price: not given.

Uniform Standards for Judging Teachers in South Dakota. By William A. Cook. Published: 1921. Purpose: to aid in analysis and constructive suggestions rather than measurement.

The rating cards are composed of Cards A, B, and C. Card A is for county superintendents, Card B is for systems with from 6 to 12 teachers, and Card C is for systems with over 12 teachers. The main headings or factors for consideration are the same for each card. Some points of analysis differ because of different conditions existing in the different systems. The main factors are: (1) scholarship, (2) professional spirit and training, (3) teaching ability, (4) school management, (5) material conditions, (6) personal equipment and appearance, (7) extra-mural efficiency. One scale is needed for each teacher.

Publisher: Bureau of Educational Research, Northern Normal and Industrial School, Aberdeen, S.D.

Price: 2 cents each.

Detroit Teacher Rating Card. Published: 1922. Purpose: to rate teachers in service.

The rating card is made up of ratings based on the leading characteristics of the teacher. The front of the card contains a form for giving the rank order rating, the general merit rating, and the important characteristics. The important characteristics are: (1) vitality, (2) personality, (3) general intelligence, (4) social intelligence, (5) professional spirit, (6) professional ability, (7) professional leadership, (8) executive ability, (9) adaptability. After each of these qualities, space is left for grading as follows: very poor, poor, medium, good, excellent. One card is needed for each teacher to be rated.

Publishers: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.

Price: \$5 per 1,000.

Scale of Qualities of Work. By Public Schools, Dixon, Ill. Published: no information. Purpose: to aid teachers in grading pupils' work and bring about uniformity if possible. Range: no information. Time to give: no information. Time to score: no information. Standardized: no information.

The scale contains suggestions for 5 grades of work, as follows: "A" work; "B" work; "C" work "D" work; "E" work. The suggestions are made under 3 headings, as follows: (I) Knowledge of subject-matter, (II) Preparation, (III) Attitude. Under each of these headings are items that will aid the teacher in giving pupils the proper grade. This is

not a test, but is an aid to the teacher's grading, the object being to bring about a uniformity if possible.

Publishers: Public Schools, Dixon, Ill.

Price: 5 cents each.

Observation and Score Cards. Project Method of Learning (not a test, but a guide to the use of the project method). By H. G. Lull. Published: 1920. Purpose: to aid teachers and pupils in the use of the project method in school.

The score cards are more a teaching device than a measuring-stick. The 3 parts are as follows: the recitation period, the study period, the drill projects. The part for the recitation period contains 16 suggestions for directing pupil activities during the recitation and 10 suggestions for teacher activities during the recitation. Part 2 contains 11 suggestions to aid the teacher. Part 3 contains 5 suggestions for pupil activities during drill work and 20 suggestions to aid the teacher. One set of cards is needed for each teacher.

Publishers: Bureau of Educational Measurements and Standards, Kansas State Normal School, Emporia, Kan.

Price: 25 cents per set containing 3 score cards and a twelve-page bulletin.

Ohio Wesleyan University Rating Blank (a score card for former students in teaching service); Placement Bureau and Follow-up of Teachers. By A. R. Mead. Published: January, 1922. First used at Ohio Wesleyan University in modified form in 1915-16. Purpose: to measure student teaching and may be used as a follow-up of teachers in service. Range: no information. Time to give: no standard time. Time to score: no standard time; not standardized.

The card is made up of 8 main factors with about 75 points for consideration. Such factors as results of teacher's work, teaching technique, professional interests and relations, community relations, etc., are considered. One card is needed for each teacher to be graded. The Placement Bureau tries to use the score card for teachers in service at least once a year.

Publishers: A. R. Mead, Ohio Wesleyan University, Delaware, Ohio.

Price: not for general distribution.

A Teacher Rating Employment Card. By Edgar Mendenhall. Published: no information. Purpose: for recommendation; intended "for the use of college and normal school presidents, superintendents, and school boards in the improvement of the teaching corps, and to help deserving educators to better positions". Range: no information. Time to give: no information. Time to score: no information. No information as to standardization.

The items in the rating scheme are arranged under five headings as follows: (1) Personal qualities, (2) Professional qualities, (3) Social qualities, (4) Community relationship, (5) Your opportunity for knowing applicant. The items are so arranged that ratings may be given for

each item ranging from a negative to a very high positive degree. One card is needed for each teacher to be rated.

Publisher: Edgar Mendenhall, Coöperative Bureau of Educational Research, State Manual Training Normal School, Pittsburg, Kan.

Price: 10 cents each.

Clergyman-Rating and Self-Improvement Scale. By Edgar N. Mendenhall. Published: 1923. Purpose: self-improvement and rating of others.

The rating scale is an adaptation of Rugg's Rating Scale for Judging Teachers. The items in the scale are arranged under five main headings, as follows: (1) Personal and social qualities, (2) Professional preparation, (3) Pulpit qualities, (4) Executive ability, (5) Pastoral, community, and social attitudes. Each of these main headings has several items under it. The scale suggests the arrangement of clergymen in such a way as to make ratings by direct comparison. One scale is needed for each person rated.

Publisher: Edgar N. Mendenhall, Coöperative Bureau of Educational Research, State Manual Training Normal School, Pittsburg, Kan.

Price: 10 cents each.

A Tentative Scale for Rating Teachers of Industrial Subjects. By A. F. Payne. Published: no information. Purpose: to measure the ability of teachers of industrial subjects. Range: no information. Time to give: no information. Time to score: no information. Standardized: no information.

The scale is made up of 7 main headings, as follows: (1) Preparation for teaching, (2) Personal qualities, (3) Success as a teacher, (4) Technique of teaching, (5) Shop management, (6) Results of teaching, (7) Professional advancement. Each heading includes from 4 to 15 items. One scale is needed for each teacher rated.

Publisher: A. F. Payne, Graduate School of Education, Harvard University, Cambridge, Mass.

Price: probably not for general use.

Rugg's Rating Scale for Judging Teachers in Service. By H. O. Rugg. Published: no information. Purpose: to measure teachers in service. Range: no information. Time to give: no information. Time to score: no information. Standardized: no information.

The scale is made up of 2 forms, A and B. Form A measures by analyzing the qualities of teachers. Form B compares the teacher under consideration with typical teachers. Each form is divided into 5 parts, as follows: (1) Skill in teaching, (2) Skill in the mechanics of managing a class, (3) Team work qualities, (4) Qualities of growth and keeping up to date, (5) Personal and social qualities. Each heading contains several points for consideration under it. One scale is needed for each teacher rated. Directions for use are printed on each scale.

Publisher: University of Chicago Bookstore, 5802 Ellis Ave., Chicago, Ill.

Price: in quantities under 200, 5 cents each net. In quantities over 200, 4 cents each net.

A Rating Scale for Judging High School and College Students. By H. O. Rugg. Published: no information. Purpose: to improve one's self thru self-rating. Range: high school and college. Time to give: not timed. Time to score: not timed. Standardized: no information as to time of year for which standards are made.

The rating card is made up of 2 forms, A and B. Form A consists of 5 parts, as follows: (1) Ability to learn to associate new ideas, (2) Qualities of industry and attitude towards school work, (3) Qualities of learning, (4) Team-work qualities, (5) Personal and social qualities. Each part contains several points under it. Form B is made up of the same 5 points used in a different way. The rating in Form B is by direct comparison. Typical students are compared with the student being rated. The score cards may be used for rating teachers. Directions for use are printed on the card.

Publisher: University Bookstore, 5802 Ellis Ave., Chicago, Ill.

Price: In quantities under 200, 5 cents each net. In quantities over 200, 4 cents each net.

The Moorehead Hundred-Point Scale for Rating Teachers. By T. H. Schutte, Flagstaff, Ariz.. Published: no information. Purpose: to rate teachers and to aid the teacher in self-analysis with a view to self-improvement. Range: no information. Time to give: no information. Time to score: no information. Standardized: no information.

The scale is composed of 100 points arranged under 5 main headings, as follows: (1) Personal and social qualities, (2) Coöperative qualities, (3) Leadership, (4) Scientific and professional attitude, (5) Teaching ability. The subdivisions aid the teacher in making the analysis. Directions for use of the scale are printed on it. One scale is needed for each teacher to be rated.

Publisher: State Teachers College, Moorehead, Minn.

Price: \$2 per 100.

READING

Adams' Silent Reading Tests. By W. C. T. Adams. Published: 1920. Purpose: to measure speed and comprehension in silent reading. Range: grades 1 to 8 inclusive. Time to give: about 15 minutes. Time to score: 1 to 3 minutes. Standardized: June standards.

There are 8 separate tests consisting of selections suitable for each grade. Each test is made up of 2 parts: a speed test and a comprehension test. Speed is determined by the number of words read per minute. Comprehension is found by questions asked on the selection read. The author regards the tests as very suitable as final examinations for the end of each mid-year. Standards, directions, and record sheets are available. One test is needed for each pupil to be tested.

Publishers: Edward E. Babb and Co., 212 East Summer St., Boston, Mass. Also State Normal School, Plymouth, N.H.

Price: 10 cents each.

Bolenius Silent Reading Tests. Only preliminary forms which were never actually used. In their place the Jones' Scale for Teaching and Testing Elementary Reading for Elementary Schools was substituted.

Research Tests in Silent Reading. By Boston Public Schools. Published: no information. Purpose: to measure quality in silent reading. Range: grades 4 to 8. Time to give: varies; about 15 minutes. Time to score: long. No information as to standardization.

The tests are made up of 2 selections for each grade. The pupils are to reproduce the selection, and to answer questions asked on it. One test is needed for each pupil to be tested.

Publisher: Department of Educational Investigation and Measurement, Boston Public Schools.

Price: not for distribution.

Brown's Silent Reading Tests. By H. A. Brown, President State Normal School, Oshkosh, Wis. Published: 1916. Purpose: to measure ability in silent reading. Range: no information. Time to give: no information. Time to score: no information. No information as to standardization.

The tests are composed of 2 selections, as follows: (1) "The Long Slide", (2) "A Morning Adventure". Out of print.

Burgess's Scale for Measuring Ability in Silent Reading. By May Ayres Burgess. Published: fall of 1920. Purpose: to measure rate of comprehension in silent reading. Range: grades 3 to 8. Time to give: 5 minutes. Time to score: short. Standardized: February scores.

The scale is composed of 4 picture supplement scales containing 20 paragraphs each. The 4 scales are of equal difficulty. Each paragraph has a picture above it. The pupils are directed to do something to the picture. The grade depends upon ability to follow directions. A key for adjusting the grades for other times of the year is given. Directions for use are printed on the scale. One test is needed for each pupil to be tested.

Publishers: Russell Sage Foundation, New York City. Bureau of Educational Measurements, Emporia, Kan.

Price: \$1.25 per 100.

Courtis Standard Practice Tests in Reading. Published: 1923. Designed to help little children to teach themselves to read. Standardized drill material.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.
Price: no information.

Courtis Research Tests in Silent Reading, No. 2. By S. A. Courtis. Published: 1917. Purpose: to measure rate and comprehension in silent reading. Range: grades 2 to 6. Time to give: 8 minutes. Time to score: no information. Standardized: June standards.

The Courtis Silent Reading Test, No. 2, Series R, is made up of 3 forms. Form I is entitled "The Kitten Who Played May-Queen"; Form

II, "The Kitty Who Went to a Picnic"; Form III, "The Kitty Who Caught a Fish". The forms are equivalent and may be used interchangeably. Each test is composed of 2 parts. Part 1 measures the rate of reading and Part 2 the comprehension. Comprehension is determined by the pupil's ability to answer questions. One test is needed for each pupil to be tested. Standards, directions, and score sheets are available.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.

Price: \$1.25 net for envelope containing material for 40 pupils.

Dearborn-Westbrook Reading Examination. By W. F. Dearborn and ——— Westbrook. Published: 1920. Purpose: to measure ability in reading. Range: grades 3 to 7. Time to give: 25 minutes. Time to score: 2 or 3 minutes. Tentative February standards.

The tests may be secured; however, the directions for giving and scoring are still in mimeographed form. They are sold only in cases where there are large numbers. Mr. Dearborn is planning a revision of the examination.

Publisher: W. F. Dearborn, Graduate School of Education, Harvard University, Cambridge, Mass.

Price: \$2.50 per 100.

Fordyce's Scale for Measuring Achievements in Reading. By Charles Fordyce. Published: 1916. Purpose: to measure speed and comprehension in reading. Range: Test 1, grades 3 to 5; Test 2, grades 6 to 9. Time to give: varies with the various grades, 100 to 140 seconds. Time to score: 5 minutes. Standardized: mid-year standards.

The scale is made up of 2 tests: (1) "Narcissus"; (2) "Spirit of Spring". It also contains 4 practice exercises in grasping and interpreting groups of words as units. Each test is composed of 2 parts. Part 1 measures speed in reading. Part 2 measures comprehension. The quality of reading is determined by the pupil's ability to answer questions on the selection. One test is needed for each pupil to be tested. Standards, a key for scoring, directions for giving, and record sheets are available.

Publisher: Bureau of Measurements and Research, Lincoln, Neb.

Price: Test I (a), 50 cents per 100; (b), 50 cents per 100. Test II (a), 50 cents per 100; (b), 50 cents per 100. Practice exercises, 60 cents per 100. Booklet giving directions to teachers, 3 cents each. Teachers' record sheets, 40 cents per 100. Standards free.

A Test for Measuring the Ability in Reading, Test II. By Charles Fordyce. Published: 1923. Purpose: to measure rate and comprehension in reading. Range: grades 6 to 9.

The test is composed of a short selection, "The Nervous System". It is to be read thru twice. At the end of 30 seconds during the first reading, the pupil is directed to draw a line around "the word on which his eye is resting". He is asked to finish the story and read it thru a second time carefully. After the second reading the pupil is to answer 10 questions on the selection. Rate is determined by the num-

ber of words read per minute and comprehension by the number of questions answered correctly. One test is needed for each pupil to be tested.

Publishers: University Extension Division, University of Nebraska, Lincoln, Neb.

Price: no information.

Standardized Oral Reading Paragraphs. By W. S. Gray. Published: 1915. Purpose: to measure rate and accuracy in oral reading. Range: grades 2 to 8. Time to give: not timed. Time to score: no information. Standardized: end-of-year standards.

The test consists of 12 paragraphs arranged in the order of difficulty. The rate is determined by the number of seconds required to read the paragraphs. Accuracy is determined by the number of errors made while reading the paragraphs. The points considered in accuracy are: complete mispronunciation, omissions, substitutions, insertions, and repetitions. One test is needed for each pupil to be tested. Standards, directions, and score sheets are available.

Publishers: Chicago University, Department of Education, Chicago, Ill. Also Public School Publishing Co., Bloomington, Ill.

Price: 65 cents per 100. Sample set, 6 cents.

Gray's Silent Reading Test. By W. S. Gray. Published: 1915. Purpose: to measure rate and comprehension in silent reading. Range: grades 2 to 8. Time to give: not timed. Time to score: no information. Standardized: end-of-year standards.

The tests are composed of 3 forms: Form B1a, for grades 2 and 3; Form B2a, for grades 4, 5, and 6; Form B3a, for grades 7 and 8. The forms differ only in difficulty. Speed is determined by the time it takes the pupil to read the selection. Comprehension is determined by reproducing the story and by answering questions about it. The first page of the test sheet contains space for reproducing the story, the second page on the back of the sheet contains questions on the selection to be answered. Directions, standards and record sheets are available. One test is needed for each pupil to be tested.

Publisher: Chicago University Bureau of Publications, Chicago, Ill. Also Public School Publishing Co., Bloomington, Ill.

Price: 80 cents net per 100.

Scales for Reading Vocabulary of Primary Children: Phonetic, Scale D; Sight, Scale D. By M. E. Haggerty. Published: 1916. Purpose: to measure reading vocabulary of primary children. Range: grades 1 to 3. Time to give: no information. Time to score: no information. Standardized: no information.

The scales are composed of the Phonetic Scale D and the Sight Scale D. The Phonetic Scale consists of 118 words, and the Sight Scale consists of 236 words. The phonetic words are arranged in a series of 9 steps, and the sight words in 12 steps. "Sub-scales" have been made for use where time is limited. The scales are much shorter than the

regular scales. They are made up of "Scale D, Phonetic" and "Scale DD, Sight". One scale is needed for each pupil to be tested.

Publisher: M. E. Haggerty, University of Minnesota, Minneapolis, Minn.

Price: out of print.

Haggerty Reading Examination. By M. E. Haggerty and others. Published: 1919, 1921. Purpose: to measure progress and aid in classifying pupils. Range: grades 1 to 12. Time to give: not timed. Time to score: short. Standardized: no information as to time standardized.

The examination is made up of 3 parts: Sigma 1; Sigma 2; Sigma 3, Forms A and B. Sigma 1 is for grades 1 to 3. It will aid the teacher to classify the pupils as well as to determine progress in reading. Sigma 3, composed of Forms A and B, represents an extended study of reading material and examinations. "Improvements in testing methods which were developed in connection with the preparation of the National Intelligence Tests have been included. Each form consists of three tests: vocabulary, sentence reading, and paragraph reading." The subject-matter used was based on its use in textbooks.

Publisher: World Book Co., Yonkers-on-Hudson, N.Y.

Price: Sigma 1, per package of 25 examination booklets, including 1 key and 1 record sheet, \$1.10 net. Sigma 3, Form A or B, per package of 25 examination booklets with 1 key and 1 record sheet, \$1.30 net. Sigma 2 in preparation. Manual of Directions, 25 cents.

Haggerty's Visual Vocabulary Tests: Part I, Forms A and B; Part II, Scales R and R₂. By M. E. Haggerty. Published: no information. Purpose: to measure the extent to which the children have acquired control of words. Range: Part I, grades 1 and 2; Part II, grades 3 to 8. Time to give: no information. Time to score: no information. Standardized: February and May scores.

The tests are divided into 2 parts. Part I is made up of 2 equivalent series, A and B. "Each series consists of 30 sight words and 25 phonic words arranged in lines." Each pupil is to be tested alone.

Part II is composed of 2 series of words called "Scale R" for grades 3 and 4, and "Scale R₂" for grades 5, 6, 7, and 8. Each series is composed of a graded series of words increasing from simple words that are familiar to almost any child to very difficult words which children seldom meet.

Publisher: M. E. Haggerty, University of Minnesota, Minneapolis, Minn.

Price: out of print.

Holmes Reading Test. By H. W. Holmes. Published: never published; used first about 1915, but will be published soon. Purpose: to measure rate and quality in reading. Range: grades 2 to 12 inclusive. Time to give: less than half an hour. Time to score: 3 or 4 minutes for each paper. Standardized: spring standards.

There are 2 separate reading tests: (a) "The Rich Man"; (b) "The Great King". In testing for rate the author emphasizes that pupils

read at their ordinary rate. The pupil is asked to read the story in the way in which he will enjoy it most and get the most out of it. Quality is determined by having the pupil reproduce the story. The author has listed 35 main ideas. The pupil is given $2\frac{6}{7}$ per cent for each idea reproduced. One test is needed for each pupil to be tested. Directions for giving and a key for scoring are available.

Publisher: H. W. Holmes, Harvard University, Cambridge, Mass.
Price: 25 cents each and postage.

Hoover and Kelley Reading Cards (practice exercises). Same as third-grade silent reading cards. Drill exercises, not a test.

Publisher: W. H. Wheeler and Co., Chicago, Ill.

Stanford Achievement Test. By Truman L. Kelley, G. M. Ruch, and Lewis M. Terman. See Stanford Achievement Test under Miscellaneous.

Jones' Scale for Teaching and Testing Elementary Reading. By R. G. Jones. Published: 1915. Purpose: to measure the vocabulary of children, also a method of teaching. Range: grades 1 and 2. Time to give: 4 minutes to the individual. Time to score: 2 minutes to the individual. Standardized: beginning and end of term.

The scale is made up of 2 tests: (1) a sight test composed of 192 words, (2) a phonetic test composed of 118 words. In deriving the tests, 10 primers were analyzed and all words occurring 10 or more times were listed under their proper headings, phonetic or sight. The original purpose of the work was to organize vocabulary for teaching purposes. It has been found to be of greater value for testing. It is an individual test. Each pupil should be separated from the rest and be given a period of 10 minutes to look over the words. The plan is to select 10 pupils at random and get the standing of the class from the score they make. A complete set for the test contains a manual, sight and phonetic cards, and check cards for recording the scores.

Publisher: R. G. Jones, 18178 Clifton Road, Lakewood, Ohio.

Price: \$2.50 net for manual and cards to test 100 pupils.

The Natural Group Test in Reading. By R. G. Jones and J. C. Foss. Published: 1922. Purpose: to measure speed and comprehension in reading. Range: grade 4. Time to give: 5 minutes. Time to score: no information. Standardized: October, December, February, and April scores.

The test is composed of 4 readings, as follows: "David", "The Journey", "A New Home", "The Vacation". They are to be given in October, December, February, and April, respectively. Speed is determined by the number of words read per minute. Comprehension is determined by ability to answer questions about the selections. One test of each used is needed for each pupil to be tested. Directions on separate sheet.

Publisher: The Dobson-Evans Co., Indianapolis, Ind., or Columbus, Ohio.

Price: 50 cents per package, 50 tests in each package. This includes instructions and score sheets.

Kansas Silent Reading Tests. By F. J. Kelly. Published: 1915. Purpose: to measure speed and comprehension in reading. Range: Test I, grades 3 to 5; Test II, grades 6 to 8; Test III, grades 9 to 12. Time to give: 5 minutes. Time to score: short. Standardized: mid-year.

The test is composed of 3 parts: Tests I, II, III. They are similarly constructed, varying only in difficulty. Each test is made up of 16 exercises; each is weighted and the value written in the margin. The pupil is asked to do something in each case which shows whether or not he understands the exercise. The median scores were determined by measuring over 100,000 children. Standards and directions for giving and scoring are available. One test is needed for each pupil to be tested.

Publisher: Kansas State Normal School, Emporia. Kan. Publication of this test has been discontinued as the publishers believe better ones are available.

Price: 70 cents per 100. Complete accessories are furnished with each order of 25 copies or more.

Kelley-Thorndike Reading Scale, Alpha 2. "This is not a test. Kelley's test is Thorndike's Reading Scale, Alpha 2, adapted to individual testing." See Teachers College Record, May, 1917, pp. 252-60, Vol. 18, Number 3.

A Scale for the Individual Measurement of Reading Ability. By Maude A. Merrill, Department of Psychology, Stanford University, Calif. Published: October, 1919. Range: grades 1 to 6 inclusive. Time to give: about 5 minutes. Time to score: 5 minutes. Standardized: October standards. Test is not available.

Monroe's Standardized Silent Reading Tests. By W. S. Monroe. Published: 1918. Purpose: to measure rate and comprehension in reading. Range: Test I, grades 3 to 5; Test II, grades 6 to 8; Test III, grades 9 to 12. Time to give: 5 minutes. Time to score: short. Standardized: January and June scores.

This is a series of 3 tests. Each test has 3 equivalent forms that may be used interchangeably. The tests are made up of a series of paragraphs arranged in order of difficulty and weighted. Speed is determined by the number of exercises done in the time allowed, comprehension is determined by the questions answered on each paragraph. One test is needed for each pupil to be tested. Directions for giving as well as norms are available.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: Tests I and II, 80 cents net per 100; Test III, \$1 per 100.

Monroe's Standardized Silent Reading Test (revised). By Walter S. Monroe. Published: revised in 1920. Purpose: to measure rate and comprehension in silent reading. Range: grades 3 to 8. Time to give: 4 minutes. Time to score: short. Standardized: end-of-year scores.

The Monroe's Standardized Silent Reading Test (revised) was revised primarily for use in the Illinois Examination: however, it may

be used as a separate test. "It consists of exercises in which the pupil is asked to read a short paragraph and to answer a question on it. In every case the question is answered by marking a certain word in a given list. The test yields a rate score and a comprehension score." One test is needed for each pupil to be tested.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: 80 cents per 100; sample sets, 10 cents.

Neher's High School Vocabulary Scale. By H. L. Neher, Northwestern University, Evanston, Ill. No information available.

Group Test in Word Recognition, Forms A and B. By Eliza Oglesby. Published: 1921, June. Purpose: to measure pupil's ability to recognize words. Range: grades 1 and 2. Time to give: 4 minutes. Time to score: 40 to 70 seconds. Standardized: no information as to time for which standards are made.

Forms A and B are equivalent and interchangeable. The test is composed of 40 exercises, made up of words, phrases, and pictures, arranged in 3 columns. The words and phrases are written in the middle column. Each word and phrase is illustrated by a picture. The picture is on the same page but not opposite the word or phrase it illustrates. The pupil is to indicate the picture that corresponds to the word or phrase.

Publisher: Eliza Oglesby, Assistant Supervisor of Reading, care Board of Education, Detroit, Mich.

Price: not yet available for general sale, but will probably be published in 1923.

Reading Vocabulary Test for the Second, Third, and Fourth Grades. By S. L. Pressey. Published: 1921. Purpose: vocabulary test. Range: grades 2 to 4. Time to give: 12 minutes. Time to score: 35 papers may be scored in 20 minutes. Standardized: May scores.

The test is made up of 36 exercises. Each exercise is composed of a question followed by several words, one of which answers the question. The pupil is to draw a line under the word that answers the question. One test is needed for each pupil to be tested.

Publisher: Department of Psychology, Indiana University, Bloomington, Ind.

Price: 35 cents per 100, including directions.

Speed of Silent Reading and Reading Vocabulary. By S. L. Pressey. Published: 1921. Purpose: to measure speed in silent reading and reading vocabulary. Range: grades 2, 3, 4. Time to give: 3 minutes, reading; 8 minutes, vocabulary. Time to score: 15 seconds. Standardized: end-of-May score.

The lists are made up of 2 forms, A and B. Tho the tests are intended to be used together, they are separate tests and may be used separately. The speed test in silent reading is composed of 34 sentences, each containing one extra word. The pupils are to find the extra word and draw a line around it. The test is intended to reveal the

extent to which the pupil has gained freedom from oral reading habits and gained in speed in silent reading.

The vocabulary test is composed of 36 questions with 4 answers after each, only one of which is correct. The pupil is to draw a line around the correct answer.

One test is needed for each pupil to be tested. Complete directions for giving, scoring, and recording scores as well as norms are printed on a separate sheet.

Publishers: Public School Publishing Co., Bloomington, Ill. Also Department of Psychology, Indiana University, Bloomington, Ind.

Price: \$1.25 per 100, each form.

Scale of Attainment, No. 1 (Spelling, Arithmetic, and Reading). By L. W. Pressey. See these tests as described under Arithmetic.

Scale of Attainment, No. 3 (Spelling, Arithmetic, and Reading). By L. W. Pressey. See these tests as listed under Arithmetic.

Price's Practical Oral Reading Test. By E. D. Price. Published: 1918.

Purpose: to measure pupil's ability in oral reading. Range: grades 2 to 8 inclusive. Time to give: 1 minute for each pupil. Time to score: by chart just published, 10 seconds per pupil. Standardized: September and May scores.

Each test consists of 2 selections to be read orally. The first test is to be given in September and the second in May. "Mistakes to be counted are: (1) words miscalled, (2) words put in, (3) words left out, (4) transposed words." The median scores were found by testing about 200 children for each grade. One set of material is needed for each examiner.

Publisher: E. D. Price, Superintendent of Schools, Enid, Okla.

Price: 75 cents for full set for testing a system.

Sackett's Reading Test. By L. W. Sackett, University of Texas, Austin, Tex. No information available.

Short Exposure Phrase Cards for the First Grade: Series A, B, C, D, and E. Published: 1922; revised, 1923. Range: first grade.

This is not a test but a drill device for increasing rate and comprehension in silent reading.

Price: Postpaid, \$3. One set includes Series A-E, 25 cards each.

Publisher: W. H. Wheeler and Co., 352 East Twenty-second St., Chicago.

Smith Silent Reading Paragraphs for High Schools. By Bertha M. Smith, High School, Oak Park, Ill. Tests and information not available.

The Measurement of Efficiency in Reading. By Daniel Starch. Published: 1915. Purpose: to measure speed and comprehension in reading. Range: grades 1 to 2. Time to give: 30 seconds for

speed; comprehension, 5 minutes. Time to score: no information. Standardized: no information as to time of year for which standards are made.

The tests consist of selections for each grade from 1 to 8 inclusive. "Thus, Selection 1 was chosen from a typical first reader, Selection 2 from a second reader, etc." The difficulty of each selection was tested by having each grade tested with the passage designed for it and also with the passage designed for the grade next below it. Speed is determined by the number of words read per second. Comprehension is determined by the pupil's ability to reproduce what has been read. One test is needed for each pupil to be tested.

Publisher: University Coöperative Co., 508 State St., Madison, Wis.
Price: no information.

Starch's Reading Tests. By Daniel Starch. Published: November, 1914. Purpose: to measure speed and comprehension in silent reading. Range: grades 2 to 8. Time to give: about 5 minutes. Time to score: 2 to 5 minutes. Standardized: June scores.

The tests are composed of selections for each grade. The number at the top of the page corresponds with the grade in which it is to be used. Two tests should be given each pupil. The first day the pupils should be tested with the selection for their own grade, the second day the test should be repeated with the selection for the grade next below that of the pupils. The tests may be used for high school and college students. Speed is determined by counting the number of words read in 30 seconds. Comprehension is determined by reproducing the story. Standards for first 8 grades as well as directions for use are available. Two sheets are needed for each pupil to be tested.

Publisher: University Coöperative Co., 508 State St., Madison, Wis.
Price: 40 cents per 100; directions, 2 cents each.

The Stone Series of Narrative Reading Tests. By C. R. Stone and others. Published: 1922. Purpose: to measure rate and comprehension in narrative reading. Range: grades 3 to 9. Time to give: 30 to 40 minutes. Time to score: short. Standardized: late fall scores.

This series is composed of 3 separate tests, one for grades 3 and 4; one for 5 and 6, and one for 7, 8, and 9. The first test contains 2 selections—"The Long Slide" and "The Strange Bird", with 10 questions on the first and 20 questions on the second. To determine rate, numbers are exhibited every 5 seconds. The pupil is to write the number on a record sheet that is exhibited at the time he finishes reading the selection. Comprehension is determined by answers given to the questions concerning the selections. Each question has 5 answers, marked *a*, *b*, *c*, *d*, and *e*, written under it, one of which is correct. The pupil is to select the answer which he thinks is correct and on the answer sheet write its letter opposite the number of the question.

The second test consists of 2 selections, "Grandmother's Panther" and "Old Mustard", with 10 questions on the first selection and 20 on

the second. Rate and comprehension are determined in same way as for the first test.

The third test consists of a selection from James Fenimore Cooper's "The Spy" and 20 questions concerning the selection. Rate and comprehension are determined as for the other tests. One test of the kind used is needed for each member of the largest class. The same tests may be used for more than one class as the pupils do not write on them.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: 10 cents per copy or \$7 for 100. One complete set of each test including directions and score key, 40 cents.

Third-Grade Silent Reading Cards. Published: 1922. Purpose: no information. Range: grade 3.

A drill device, not a test.

Publisher: W. H. Wheeler Co., 352 East Twenty-second St., Chicago, Ill.

Price: \$1.70 per set, postpaid. Set, 650 cards per set and booklet.

Thorndike's Reading Scale, Alpha 2. Adapted to Individual Testing. By Truman L. Kelley. Published: 1917. Purpose: to measure ability of individuals in reading. Range: no information. Time to give: no information. Time to score: no information. Standardized: no information as to time of year for which standards are made.

The scale is an adaptation of the Thorndike Scale, Alpha 2, to individual testing by the arrangement of 2 tables, A and B, in such a way that the records of individuals may be evaluated. Out of print.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: No information.

Thorndike's Visual Vocabulary Scale. By E. L. Thorndike. Published: 1916; revised, 1920. Purpose: to measure pupil's word knowledge. Range: grades 3 to 10. Time to give: 30 minutes. Time to score: short. Standardized: end-of-year standards.

The scale is made up of Series A and B and composed of four scales: A2, Series X; and A2, Series Y; B, Series X; and B, Series Y. Each scale is similarly constructed and administered. "Each scale consists of a graded series of words which the pupil is to classify according to certain specified groups, such as an animal, a flower, a name, a word about war or fighting, etc." The words in the A series are about animals, flowers, etc., and those in the B series are about war, fighting, business, money, etc. The X or Y series may be used as alternates to check results or to measure improvement over a period of time. One copy of the scale to be used is needed for each pupil to be tested. Stencils for scoring the scales, manual of directions, and record sheets are available.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: 50 cents per 100 each scale. Manual of directions, 40 cents. One answer stencil for each scale, 5 cents each. One record sheet for each 50 pupils, 3 cents.

Thorndike's Test of Word Knowledge. By E. L. Thorndike. Published: 1921. Purpose: to measure word knowledge. Range: grades 4 to 10. Time to give: 20 minutes. Time to score: short. Standardized: in process of standardization; present norms for mid-year.

The test is composed of 100 exercises. Each exercise contains several words. The first word in the exercise is the key word. The pupils are to find the other words in the exercise that mean the same or nearly the same as the key word. A stencil has been constructed so that it may be placed on the page in such a way that only the correct words appear thru the perforations. The pupil's score is the number of correct answers. One test is needed for each pupil to be tested.

Publisher: Mason D. Gray, East High School, Rochester, N.Y.

Price: \$1.50 per 100.

Thorndike's Reading Scale, Alpha 2: Silent Reading. By E. L. Thorndike. Published: 1920. Purpose: to measure pupil's understanding of sentences. Range: grades 3 to 12. Time to give: 40 minutes. Time to score: short. Tentative standards.

The scale is printed in 2 parts on large sheets and consists of paragraphs arranged in order of difficulty. The 2 parts have been combined in the form of a single booklet and constitute the tenth form of the Thorndike-McCall Reading Scale. If this booklet form is desired, the purchaser should ask for the tenth form of the Thorndike-McCall Test when ordering. This test is available, however, as Part I and II, printed on the large sheets, for those who prefer this older form. Part I may be used in grades 3, 4, 5, and Part II in grades 6 to 12. One scale to be used is needed for each pupil to be tested. Directions for giving record sheets and a key for scoring are available.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: 70 cents per 100 for either Part I or II. Directions, 25 cents.

Thorndike-McCall Reading Scale. By E. L. Thorndike and W. A. McCall. Published: 1920. Purpose: to measure rate and comprehension. Range: grades 2 to 12. Time to give: 20 to 30 minutes. Time to score: 4 to 5 minutes. Standardized: end-of-year standards.

The scale is made up of 10 or 11 paragraphs, stanzas, arranged in order of difficulty. Each paragraph is followed by a series of questions to be answered by the pupil after reading the paragraph. Since the scale may be used each month, it is a teaching device as well as a measuring scale. There are 10 forms of the scale which are equivalent and may be used interchangeably. "The scale is standardized both by age and grade and permits computation of the 'Reading Quotient'." One copy of the form to be used is needed for each pupil to be tested. Directions and record sheets are available.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: \$2 per 100 each form. Directions and record sheets are supplied with each order.

Van Wagenen Reading Scales. By M. J. Van Wagenen. Published: 1922. Purpose: to measure pupil's ability to read and comprehend English literature, history, or general science. Range: grades 7 to 12. Time to give: about 50 minutes. Time to score: 1 minute. Standardized: end-of-year scores.

There are 3 separate scales, one dealing with English literature, one with history, and one with general science. Each scale is made up of 15 paragraphs, arranged in 3 groups. Below each paragraph from 4 to 6 statements are made. The pupil is to put a check mark "in front of each statement which contains an idea that is in the paragraph or that can be derived from it". Each paragraph is weighted. One scale of the kind to be used is needed for each pupil to be tested. A class record sheet containing directions for giving, a key for scoring, and blanks for recording are available.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: \$3 per 100.

Witham's Silent Reading Tests: No. I, Mechanical Content; No. II, Literary Content. By E. C. Witham. Published: 1921. Purpose: to measure pupil's ability in silent reading. Range: grades 4 to 12. Standardized: winter standards. Time to give: 20 to 30 minutes. Time to score: $\frac{1}{2}$ minute.

The tests are composed of 2 separate tests similar in construction and arrangement. No. I deals with mechanical content and No. II with literary content. Each test consists of 15 short stories with sentences out of proper order. The pupil is to read the sentences thru so as to get some idea of the story. "Then read again, and carefully decide the correct order of the sentences, and number in the parenthesis at the left." One test is needed for each pupil to be tested. Directions for giving and standard scores are printed on each test. Especially suitable for junior and senior high schools.

Publisher: J. L. Hammett Co., Cambridge, Mass.

Price: \$1 per set of 50, including directions for giving and a key for scoring.

Woody Silent Reading Test. By Clifford Woody. Published: in preparation. Purpose: to measure ability in silent reading. Range: no information. Time to give: no information. Time to score: no information. Standardized: no information.

The test is composed of 2 forms of equal difficulty and similar in construction and arrangement. Each form contains 9 paragraphs. After each paragraph, 5 statements are written. The pupil is to indicate the one he thinks best expresses the central thought in the paragraph. One test of each given is needed for each pupil to be tested.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: no information.

RELIGION

Chart of Habits and Attitudes of Christian Character. By Josephine L. Baldwin. No information available.

True and False Test in Religious Education. By Adelaide T. Case, Department of Religious Education, Teachers College, Columbia University, New York City. Miss Case says: "There is no such test. I did some preliminary experimentation last summer [1922] and am still at work on the problem."

Multiple Choice Test of Religious Idea. By Clara F. Chassell and Laura M. Chassell, New York City.

See Chapter 4 of "Measurements and Standards in Religious Education", Volume II of the Report of the Indiana Survey of Religious Education by Dr. Walter S. Athearn, published by George H. Doran Co., New York City, N.Y.

Drew Tests in Religious Education. By Clara F. Chassell, Teachers College, Columbia University, New York City. Published: December, 1921. Range: grades 3 to 8. Time to give: 20 to 35 minutes. Time to score: 2 minutes. Not standardized.

There are 3 separate tests, as follows: Parable Interpretation; The Drew Measurement Chart for Sunday School Pupils; Teacher's Rating School for Sunday School Pupils. The Parable Test is made up of 10 parables: (1) The Lost Sheep, (2) The Lost Coin, (3) The Prodigal Son, (4) The Good Samaritan, (5) The Sower, (6) The Ten Virgins, (7) The Rich Fool, (8) The Rich Man and Lazarus, (9) The Unmerciful Servant, (10) The Pounds. Two questions are asked about each parable. The questions are followed by 4 answers, one of which is correct. The pupils are to check the correct answers.

The Drew Measurement Chart for Sunday School juniors contains 20 questions concerning important things a junior in Sunday School should do. Each question may be answered in 4 ways as follows: (1) Never, (2) Sometimes, (3) Nearly always, (4) Always. Each pupil makes his own chart.

The Teacher's Rating Scale for Sunday School Pupils is an "adaptation" for Sunday School use of the Rating Scale used in the United States Army during the war. Four traits of character are considered, as follows: (1) Dependability, (2) Self-mastery, (3) Activity in service, (4) Activity in worship. One booklet containing the 3 tests is needed for each examiner.

Publisher: Clara F. Chassell, Teachers College, New York City.
Price: 15 cents per copy, postage prepaid.

A Test of Religious Ideas involving the Ranking of Selected Answers. By Clara F. Chassell and Laura M. Chassell. Published: 1922. Purpose: to secure information as to the religious conceptions held by children. Range: grades 4 to 12. Time to give: 30 minutes. Time to score: answers to be tabulated. Not standardized.

The test is composed of 7 questions followed by from 10 to 30 answers each. The pupils are to choose from each group from 3 to 5 answers that seem best to them. One test is needed for each pupil to be tested.

Publishers: Committee on Social and Religious Survey, 111 Fifth Ave., New York City.

Price: 5 cents each.

Biblical Tests. By Dr. George A. Coe, Teachers College, Columbia University, New York City. Dr. Coe, April 24, 1923, said: "Not completed, not published. No public reference authorized."

Score Card for Measuring Church and Religious Education Plants. By E. S. Evenden, Teachers College, Columbia University, New York City. Published: 1922. Range: city church and religious education plants. Time to give: 30 minutes to 2 hours, depending on size of plant. Time to score: included in the giving. Standardized: no information as to time of standardization.

Publisher: Inter-Church Press, New York City.

Price: \$1 each. May possibly be sold for less.

Sunday School Examination A. By J. T. Giles. Published: 1920. Range: 10 years and above. Time to give: 15 to 20 minutes. Time to score: 2 minutes. Standardized: May standards.

Publisher: J. T. Giles, State Department of Education, Madison, Wis.

Price: no information.

Hartshorne's Scale for Measuring Growth in Religion. By Professor Hugh Hartshorne, 3551 University Ave., Los Angeles, Calif. On April 11, 1923, Professor Hartshorne wrote: "The listing of a scale for the measurement of growth in religion was an error on the part of the World Book Co. There is no such scale, tho we trust that in the course of time one may be developed. The error probably came from a misinterpretation of my article on the Measurement of Growth in Religion in the June, 1919, number of the magazine, Religious Education, 1440 East Fifty-seventh St., Chicago, Ill."

Laycock Test of Biblical Information. By S. R. Laycock. Published: 1922. Purpose: informational. Range: grades 7 to 12 inclusive. Time to give: 20 to 25 minutes. Time to score: 2 to 3 minutes. Standardized: September and October scores.

There are 7 separate tests with a total of 100 questions on various parts of the Bible. All the tests, except No. 3, are made up of questions with 4 answers, 3 of which are incorrect. The pupils are

to check the correct answers. Test 3 is a true-false test. The pupils are to check the sentences as true or false. One test is needed for each pupil to be tested.

Publisher: S. R. Laycock, University of Alberta, Edmonton, Canada.

Price: 15 cents each, including directions for giving and scoring. Package of 20 tests with manual and key, \$1.

Tests for Sunday School Literature. By C. C. Peters, Ohio Wesleyan University, Delaware, Ohio. Published: to be published this fall (1923) by the Committee on Social and Religious Surveys, 111 Fifth Ave., New York City. Range: all grades except adults. Time to give: a test for measuring books, not pupils. Standardized: does not require usual standardization. It is like a building score card except that there are scales for evaluating each item.

This is a score card for measuring the merit of church school textbooks, with the items each defined by a scale. There are 40 scales mostly made after the methods used by Thorndike in his handwriting scale, 3 scales for measuring the literary style, 2 for measuring pictures, etc.

Publisher: Inter-Church Survey Headquarters, 111 Fifth Ave., New York City; also George H. Doran Co., 244 Madison Ave., New York City.

Price: probably about \$2 since it will be a 350-page booklet.

Bible Knowledge Tests: Old Testament Series A. By M. T. Whitley. Published: 1920. Purpose: to measure Biblical knowledge. Range: "Children 9 years old and upward who are above the Primary Department". Time to give: 30 to 35 minutes. Time to score: 4 minutes; with stencil, 2 minutes. Partly standardized.

There are 5 tests, as follows: (1) Relationship and location of books (30 questions), (2) Sources of quotations (10 questions), (3) Order of Bible books (15 questions), (4) History facts (40 questions), (5) Completed quotations (11 questions). Directions for administering and a key for scoring are available. One test is needed for each pupil to be tested.

Publisher: M. T. Whitley, Teachers College, Columbia University, New York City.

Price: 6 cents for single copies; 70 cents per dozen plus 1 guide; \$2.50 per 50 plus 2 guides; \$5.75 for 100 plus 3 guides.

SCIENCE

Caldwell's Science Tests: Botany, Chemistry, Zoölogy, and Physics. By O. W. Caldwell. Published: 1919. Purpose: to measure ability in observation and discrimination, to recall and use previous information, and to interpret reasons for occurrences. Range: grades 7, 8, and 12. Time to give: no information. Time to score: no information. Not standardized.

There are 9 tests arranged in 3 groups, as follows: Group 1 deals with observation and discrimination; Group 2 deals with pupils' abilities

to recall past experiences in nature studies; Group 3 deals with the interpretation of things which change under the observation of the pupil. For example, the subjects for study in Test 1 were leaves. A pair of leaves, one from an oak and one from an elm tree, was mounted on a card. The tests have never been published for distribution.

Publisher: no information.

Price: no information.

Downing's Range of Information Test. By E. R. Downing. Published: January, 1920. Purpose: a test for information. Range: grade 7, to college sophomore. Time to give: no information. Time to score: rather long. Tentative standards.

There are 3 tests or lists of words and phrases to be defined. Each list contains 50 words or terms. The test is given by having the pupils put E beside words and phrases he can explain or define, F beside those he has heard before but that are not clear, and N before those that are new. He is directed to define the first 5 marked E. The grade is determined from the 5 given. One test is needed for each pupil to be tested.

Publisher: University of Chicago Bookstore, 5802 Ellis Ave., Chicago, Ill.

Price: 40 cents per 100.

Stanford Achievement Test. By Truman L. Kelley, G. M. Ruch, and Lewis M. Terman. See Stanford Achievement Tests under Miscellaneous.

The Ruch-Popenoe General Science Test. By G. M. Ruch and H. F. Popenoe. Published: 1923. Purpose: information test. Range: general science classes. Time to give: 40 to 45 minutes. Time to score: 5 to 10 minutes. Standardized: June scores.

The test is made up of 2 parts. Part I is composed of 50 exercises. Each exercise is composed of a statement with several words after it. The pupil is to draw a line under the word that makes the statement true. Part II consists of 20 diagrams. Each diagram has a number of questions about it. The pupil is directed to study the diagrams and then fill in the blanks which have been provided for the answers. In most cases only one word will need to be written. One test is needed for each pupil to be tested.

Publisher: World Book Co., Yonkers-on-Hudson, N.Y.

Price: now in preparation.

Ruch's Range of Information Test in General Science. By G. M. Ruch. Published: 1919. Purpose: to measure information. Range: general science classes. Time to give: 30 to 45 minutes. Time to score: 10 minutes each. Standardized: June scores.

The test is made up of 50 terms derived by the survey of the general science texts in use. Over 20 textbooks and manuals were examined. Each term containing a strictly scientific usage was recorded. If a term was found to be common to half or more of the texts it was

retained. In this way 180 words were selected. The 180 words were thought too many, so 50 were selected from the 180 by chance and used as a test. The pupils are to define or explain the terms in the test. One test is needed for each pupil to be tested. Directions for giving and record sheets are available.

Publisher: G. M. Ruch or Leo H. Cossman, University of Oregon, Eugene, Ore.; also World Book Co., Yonkers-on-Hudson, N.Y.

Price: out of print.

Van Wagenen Reading Scales: General Science, Scale A. By M. J. Van Wagenen. Described under Reading.

SPANISH

Handschin's Modern Language Tests: Silent Reading Test A: Spanish. By C. H. Handschin. Copyrighted: 1919. Purpose: to measure pupil's ability in elementary Spanish. Range: first and second years of high school Spanish. Time to give: 5 minutes. Time to score: 1 minute or less. Standardized: end of first and second semesters.

The test is composed of 14 exercises written in Spanish. The pupil is to answer in Spanish as many of them as possible in 5 minutes. Directions for administering are printed on the tests. One test is needed for each pupil to be tested.

Publisher: World Book Co., Yonkers-on-Hudson, N.Y.

Price: material for 50 people, including directions, key, 4 record sheets, etc., \$1, plus transportation.

Silent Reading Test B: Spanish. By C. H. Handschin. Published: 1920.

Purpose: to measure pupil's ability to derive the meaning of a selection of connected discourse. Time to give: 6 minutes. Range: first and second years of Spanish. Time to score: short. Standardized: no information.

The test is composed of 2 short connected paragraphs in Spanish. The pupil is given one minute in which to read the selection, then he is asked to turn his paper over and answer in Spanish or English, 10 questions asked on it. The test is a "time limit" test and when time is called the pupil is to draw a line around the last word read. The tests and record sheets have directions printed on them. One test is needed for each pupil to be tested.

Publisher: World Book Co., Yonkers-on-Hudson, N.Y.

Price: \$1 for material for 50 pupils, including 4 record sheets, instructions, and a key.

SPELLING

Ayres' Spelling Scale. By L. P. Ayres. Published: 1915. Purpose: to measure the ability to spell commonly used words. Range: grades 3 to 8. Time to give: 4 minutes. Time to score: 20 seconds. Standardized: mid-year standards.

The scale is composed of 1,000 words computed from an aggregate of 1,400,000 spellings by 70,000 children in 84 cities thruout the country. According to the data, they are the 1,000 commonest words in English writing. They are arranged in 26 columns with the words in each column of approximately equal spelling difficulty. The steps in spelling difficulty from one column to the next are approximately equal. The standard for each grade is written over each column. By the use of the scale, a pupil's standing relative to his grade can be easily measured. One scale is needed for each teacher or examiner.

Publisher: Russell Sage Foundation, New York City.

Price: Sample copies, 10 cents; 100 or more, \$9 per 100.

The Results of a Spelling Test. By Board of Education, Cleveland, Ohio. Published: 1918. Purpose: to measure the spelling ability of the pupils in the Cleveland public schools. Range: grades 3 to 8. Time to give: not "time limit" test. Time to score: $\frac{1}{2}$ to 2 minutes. Standardized: Ayres standards.

The test has never been published as a regular spelling test. It is now out of print.

Boston Experimental Method of Teaching Spelling.

Publisher: C. M. Lamprey, Boston Model School, Boston, Mass.

Spelling Tests, Boston Public Schools, Boston, Mass. Published: May, 1919. Range: grades 4 to 8 inclusive. Time to give: varies. Standardized: June scores.

Publisher: Boston Public Schools, Boston, Mass.

Price: Not for general distribution.

Boston Minimum Spelling List. Boston Public Schools, Boston, Mass. Published: 1914. Range: grades 1 to 8 inclusive.

This is merely drill material, not a test.

Buckingham Spelling Scale. By B. R. Buckingham. Published: 1913. Purpose: to measure pupil's spelling ability. Range: grades 3 to 8 inclusive. Time to give: varies. Time to score: varies. Standardized: fall term.

The scale is composed of 2 lists of 25 words each selected from a school list of 5,000 words. These words have been carefully evaluated and have been found to have a nearly uniform decrease in difficulty from grade to grade.

Publisher: Teachers College, Columbia University, New York City.

Price: no longer available.

The Buckingham Extension of the Ayres Spelling Scale. By B. R. Buckingham. Published: 1918. Purpose: to measure spelling ability. Range: grades 2 to 9 inclusive. Time to give: not a "time limit" test. Time to score: no information. Standardized: end-of-year scores.

The scale is composed of 1,505 words. It is really the Ayres scale with 505 additional words. It is not intended as a test but words may be selected from it for testing classes. The words in each column are of approximately equal spelling difficulty and the steps from one column to the next are approximately equal. The scale contains all necessary directions for use. One scale is needed for each teacher or examiner. This is not a test but a list of words from which a teacher can make a test.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: single copies, 14 cents each. Three or more copies, 12 cents each.

Buckingham-Coxe Spelling Scale. By B. R. Buckingham and W. W. Coxe. Published: November, 1922. Purpose: to measure the effect of the study of Latin on the ability to spell. Range: grades 7 to 12. Time to give: about 12 minutes. Time to score: 2 to 4 minutes. Standardized: for some grades—November, February, and May.

The scale is made up of 50 words, 25 of Latin origin and 25 of non-Latin origin. They are alternated in the list. The tests are to be given "only in all English classes, Latin and non-Latin alike, of the particular grades (7th, 8th, or 9th) in which Latin was begun in February, 1922". The papers of pupils who have had previous training in Latin should be discarded. The tests have never been published for distribution.

Publisher: Bureau of Coöperative Research, School of Education, Ohio State University, Columbus, Ohio.

Price: price not fixed as yet, since it is not available for general distribution.

Courtis' Standard Research Tests in Spelling and Handwriting, Series S, Folder B. By S. A. Courtis. Published: 1916. Purpose: speed and accuracy and the effect of a "time limit" test on each. Range: grades 2 to 8. Time to give: time for writing each sentence is given in numbers at the beginning of each sentence. Time to score: no information. Standardized: June scores.

This series is made up of separate tests suited for different groups of pupils. Dictation Test 5 is for grades 4, 5, 6. Dictation Test 9 is for grades "high sixth to high eighth". If the pupil has not finished writing a sentence when time is called he is to stop writing and begin the new sentence when given. Courtis standards are given in the timed sentences and Ayres standards are given in the untimed sentences. Directions for giving and scoring are furnished. One scale is needed for each teacher or examiner.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.

Price: 5 cents each for Standard Dictation Tests. Class record sheets, 3 cents each. School record sheets, 2 cents each. A complete copy, including directions for giving and score key, 17 cents.

Courtis Standard Supervisory Tests in Spelling. Published: 1918. Purpose: no information. Range: grades 2B to 8A. Time to give: 3 minutes. Time to score: 30 minutes. Standardized: for beginning and end of each semester. Sentence dictation tests, Form A, to be given at beginning of semester and Form B at close.

Publisher: S. A. Courtis, 1807 East Grand Boulevard., Detroit, Mich.
Price: complete set (material for 2 tests of 40 children), 2 forms, \$1.10 each.

Courtis Standard Supervisory Tests (Composition Spelling Test). By S. A. Courtis. Published: 1919. Purpose: to measure the pupil's ability to spell in composition writing. Range: 2B to 8A. Time to give: 3 minutes. Time to score: 30 minutes. Standardized: beginning and end of each semester.

The test was constructed to replace pages 43-44 of "Teaching Spelling by Plays and Games". The pupils are assigned some subject on which they are to write for 10 minutes. Complete directions for giving and scoring are printed on a leaflet. One leaflet is needed for each examiner or teacher.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.
Price: one complete set of material for giving and scoring test, 57 cents.

Teaching Spelling by Plays and Games. By S. A. Courtis. Published: 1917. Purpose: to give perfect control in spelling essential words, also method of teaching. Range: grades 2 to 8. Time to give: 3 minutes. Time to score: 30 minutes. Standardized: for beginning and end of each semester.

"Teaching Spelling by Plays and Games" is a 63-page booklet containing a course in spelling for grades 2 to 8 inclusive, with methods of teaching and tests to be given at beginning and close of each semester, and contains spelling in both column and composition form. Games are so arranged as to get spontaneous use of words, and in this way the teacher ascertains whether or not the words are perfectly learned. The booklet contains suggestive games and directions for scoring. One booklet is needed for each teacher.

Publisher: S. A. Courtis, 1807 East Grand Boulevard, Detroit, Mich.
Price: 43 cents per copy.

Standard Dictation Tests in Spelling, Form E. Detroit Public Schools. Published: no information. Purpose: to measure pupil's ability to spell words in sentences. Range: grades 5 to 8. Time to give: no information. Time to score: no information. Standardized: no information as to time of year for which tests are standardized.

There are 2 tests, A and B, for each grade from 5 to 8 inclusive. Each test contains 10 sentences. The tests are primarily for the

Detroit schools but may be used in other systems. The standards used are Detroit standards. The tests are to be given at the beginning of the semester and a form of the same test at the end of the semester. One test of each used is needed for the teacher or examiner.

Publisher: S. A. Courtis, Detroit, Mich.

Price: No information.

Nebraska Spelling Scale. By Charles Fordyce. Published: 1918. Purpose: to measure speed and accuracy in written spelling. Range: Test 1, grades 3 to 5; Test 2, grades 6 to 9. Time to give: 3 minutes. Time to score: 5 minutes. Standardized: May standards.

The scale is made up of 9 sentences which include the words to be spelled. The words are taken from the Ayres Scale. The time for writing each sentence varies with the grade being tested. "The instructor will find it helpful to give immediately the same list of words pronouncing them in the traditional way, without the sentence. A comparison of the two results is usually surprising, when we remember that no additional instruction has been given on the list of words." One scale is needed for each teacher or examiner.

Publisher: Charles Fordyce, University of Nebraska, Lincoln, Neb.

Price: 3 cents per copy. Record sheets, 1 cent per copy.

Guhin's Test Yourself in Spelling. By J. S. Guhin, Aberdeen, S.D.
"This is not a test, but is intended for private study by pupils."

Minnesota Spelling Test. By M. E. Haggerty, University of Minnesota, Minneapolis, Minn. Out of print and no information available.

Sixteen Spelling Scales. By Earl Hudelson, F. L. Staton, and Ella Woodyard. Published: September, 1920. Purpose: to measure spelling ability. Range: grades 7 to 12. Time to give: about 15 minutes. Time to score: about 1 minute. Standardized: February scores.

The scales are made up of 16 lists of 20 words each, standardized in sentences. The words were selected from 23 100-word lists and spelled from 160 to more than 1,200 times by pupils in grades 7 to 12. The lists were tested out in 29 cities. The words to be spelled are incorporated in sentences. The sentences containing the words to be spelled are read, then the words are pronounced. Besides the lists that are contained in sentences, the booklet contains the entire list of words with frequencies, making it possible to construct other lists. One booklet is needed for each teacher or examiner.

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: 40 cents each.

Iowa Spelling Scale. By E. J. Ashbaugh. Published: September, 1919. Purpose: to measure spelling ability of elementary school pupils. Range: grades 2 to 8. Time to give: no information. Time to score: no information. Standardized: mid-year scores.

The scale is composed of 2,977 words arranged in 3 separate scales. Scale 1 contains 28 steps and is designed for grades 2, 3, and 4. The

words contained in each step are of approximately equal difficulty. The scale for grades 4, 5, 6 contains 20 steps and that for grades 6, 7, and 8, 15 steps. This scale is not published for general distribution.

Publishers: University of Iowa, Iowa City, Iowa.

Iowa Dictation Exercises and Spelling Tests. By E. J. Ashbaugh. Published: about 1917. Purpose: to measure speed and accuracy in column and context spelling. Range: grades 3 to 8. Time to give test: about 20 minutes. Time to score: no information. Standardized: end-of-year standards.

There are 3 tests, as follows: Forms I, grades 3 and 4; II, grades 5 and 6; III, 7 and 8. Each form contains 40 words to be spelled. Twenty are embedded in sentences and 20 arranged in columns. The sentence exercises are "time limit" exercises. Thirty seconds are allowed for writing each sentence. If a sentence has not been finished when time is called, the pupil stops writing on it and begins on the new sentence. One test is needed for each examiner. Directions for use and score cards are available.

Publishers: Extension Division, University of Iowa, Iowa City, Iowa. Price: 1½ cents per sheet.

Iowa Spelling Test, Series S-2, Form 1. Published: 1923. Purpose: to measure ability in spelling. Range: grades 2 to 8. Time to give: 25 to 30 minutes. Time to score: 4 minutes. Standardized: mid-year.

The tests are composed of 50 words for each grade selected from the Iowa Spelling Scales. "The standard accuracy for each grade is 73 per cent. Material is available from grades 3 to 8 inclusive. One copy of this spelling list is needed for each teacher."

Publishers: Extension Division, Iowa University, Iowa City, Iowa. Price: 2 cents each.

Stanford Achievement Test. By Truman L. Kelley, G. M. Ruch, and Lewis M. Terman. See Stanford Achievement Test under Miscellaneous.

Jones' One Hundred Spelling Demons. By W. Franklin Jones. Published: 1913. Purpose: a list of the 100 words most often misspelled by pupils in written work. Range: Part 1, grades 2 to 4; Part 2, grades 5 to 8; Jones Junior High School Spelling Book, grades 7, 8, and 9. Time to give: no information. Time to score: no information. Not standardized.

A list of the 100 words most often misspelled by pupils in their written work—a result of an eight-years' investigation into the materials of spelling by Dr. W. F. Jones. Not a standardized test. The "demons" are included in the Jones spelling books. The test is composed of 100 words selected from a study involving 15,000,000 words. From the 15,000,000 the 100 words most commonly misspelled by 1,050 grade students were selected.

Publisher: Hall and McCreary Co., 432 South Wabash Ave., Chicago. Price: no information.

Los Angeles Tests in Spelling. By Bureau of Educational Research, Los Angeles Public Schools, Los Angeles, Calif. Published: 1918. Purpose: "to test the difficulty of words, and to measure the ability of pupils to spell". Range: grades 3 to 8. Time to give: not "time limit" tests. Time to score: no information. Local standards for end of year.

The tests consist of separate tests for each grade from 3 to 8 inclusive. The words are selected from the Ayres 1,000 words. The words are selected in such a way that the work of the Los Angeles schools may be compared with that of the Cleveland schools.

Publisher: Bureau of Educational Research, Public Schools, Los Angeles, Calif.

Price: not printed for general distribution.

Monroe's Timed Sentence Spelling Test. By W. S. Monroe. Published: 1918. Purpose: to measure speed and accuracy in spelling. Range: grades 3 to 12. Time to give: time for writing each sentence given at the beginning of the sentence. Time to score: no information. Standardized: May standards.

There are 3 separate tests. Test 1 for grades 3 and 4 is composed of words selected from Ayres lists for grades 3 and 4. The words are embodied in sentences that are dictated by the teacher and written by the pupils. Each pupil is to stop writing, if not thru, when the next sentence is dictated, and begin on the new sentence. Test 2 for grades 5 and 6 and Test 3 for grades 7 and 8 and the high school are constructed and administered in a similar way to Test 1. One set is needed for each teacher or examiner.

Publisher: Public School Publishing Co., Bloomington, Ill.

Price: Single sets, 12 cents; 3 or more sets, 10 cents each. Extra record sheets, 1 cent each.

Measurement of Ability in Spelling. Mr. Eugene A. Nifenecker, Director of Reference, Research, and Statistics, 500 Park Ave., New York City, on April 26, 1923, wrote: "Measurement of Ability in Spelling is a report on some tests given to about 25,000 children. The tests consisted of 2 lists of 50 words each from Jones' One Hundred Spelling Demons, and, secondly, the Buckingham Spelling Scale devised by Buckingham in 1914. From the results of the tests 3 spelling scales were devised. In scaling the results McCall's 'T' score method was employed and norms were set up."

Some Measurements in Spelling. Mr. Nifenecker (see above) wrote on April 26, 1923: "This is a report on some tests in spelling given to about 6,000 children in districts 45 and 46 of this city. The test consisted of about 25 words taken from column 'T' of the Ayres Spelling Scale and was given to classes from the fifth to eighth year inclusive."

Scale of Attainment, No. 1 (Spelling, Arithmetic, and Reading). By L. W. Pressey. For description see heading Arithmetic.

Scale of Attainment, No. 3 (Spelling, Arithmetic, and Reading). By L. W. Pressey. For description see heading Arithmetic.

A Scale for Measuring Ability in Phonetic Spelling. By Reavis, Edmiston, and others. No information obtainable.

The Rice Spelling Test. By J. M. Rice. Published: 1897. Purpose: to measure spelling ability and to eliminate waste. Range: grades 4 to 8. Time to give: no information. Time to score: no information. Standardized: no information.

There are 3 tests: word lists; composition form, words used in sentences dictated by the teacher; composition form, pupils selected their own words in telling a story. The first 2 tests consist of 50 words each selected by the author. The third does not consist of any definite list of words. The author regarded the third form as the most valid as it required the pupils to select and spell their own words. These tests are not published for distribution.

Not published separately as a test.

Starch's Spelling List. By Daniel Starch. Published: November, 1914. Purpose: to measure the pupils' spelling ability. Range: grades 3 to 12. Time to give: 20 minutes. Time to score: 2 or 3 minutes. Standardized: June scores.

The test is composed of 6 lists of 100 words each. Each grade is to be tested twice, once on each of 2 succeeding days. Use any one of the 6 lists the first day and any of the others on the second day. On the first grade, use the first 40 words of the list; in the second grade, the first 65 words; in the third grade, the first 80 words; in the fourth grade, the first 90 words; and in all the other grades, use the entire list. One test is needed for each teacher or examiner. Directions for giving, scoring as well as standard scores, are printed on the test.

Publishers: University Coöperative Co., 508 State St., Madison, Wis.
Price: 5 cents per sheet.

Stark's Spelling Test. By William E. Stark. The test was never published. "The plan was to take the words of the Ayres' List (1,000 words) and write connected dictation material interesting to the pupils of the various grades, so that in a dictation exercise for the fifth grade, for example, there should be included all the words assigned to that grade and many of those assigned to preceding grades."

Thurstone's Spelling Test. By Dr. L. L. Thurstone. Out of print as a separate form. See "Clerical Examination" by L. L. Thurstone under the subject Vocational.

Preliminary Phonic Word Scale (for psychological and educational clinics, and for special schools). By J. E. W. Wallin. This material has never been printed.

STENOGRAPHY AND TYPING

Blackstone's Stenographic Proficiency Tests. By E. G. Blackstone. Published: now in preparation. Purpose: to measure proficiency in typewriting. Range: no information. Time to give: 3 minutes. Time to score: 1 minute. Standardized: end-of-semester scores.

The tests in typewriting are available in 5 forms: A, B, C, D, and E. These forms measure proficiency of progress at different stages of development. One test of each given is needed for each pupil to be tested. The tests contain the material to be copied, directions for taking, and an individual progress record graph. The manual of directions for the teacher gives instructions for use. "Tests of ability in note-taking and transcribing are in preparation."

Publisher: World Book Co., Yonkers-on-Hudson, N.Y.

Price: In press. Write to publishers.

Bureau Tests VI, VII, and VIII. By Bureau of Personnel Research, Carnegie Institute of Technology, Pittsburgh, Pa. Published: 1919. Purpose: for selection of stenographers. Time to give: Test VI, 15 minutes; Test VII, 2 to 4 minutes for each part; Test VIII, 2 to 5 for each part. Time to score: short. Range: high school and colleges. Standardized: thruout year.

This Bureau group is composed of an intelligence test and 2 tests on general fitness for office work. Test VI is a measure of the applicant's mental capacity. The test is an adaptation of the U.S. Army Test. The items are so selected and arranged as to give no advantage to specialists in any line. The test should be given with exact time limits. Fifteen minutes should be allowed.

Test VII is a stenographic test. The test is divided into 6 parts: spelling, writing, business letters, copying, correcting business letters, and copying unfamiliar material.

Test VIII is made up of 5 parts: copying and correcting business letters, use of symbols for words, and cross-out tests. The test is especially strong in bringing out ability to follow directions and adapt one's self quickly to different types of work.

One test of each used is needed for each pupil to be tested. Complete directions for giving and scoring are available.

Publishers: Bureau of Personnel Research, Carnegie Institute of Technology, Pittsburgh, Pa.

Price: 10 cents each.

Cody's Commercial Tests and How to Use Them. By Sherwin Cody. Copyrighted: 1919. Purpose: to measure business ability. Range: no information. Time to give: 5 to 20 minutes each. Time to score: short. Standardized: no information.

The tests are published in a handbook (216 pages). The book is made up of 2 parts. The first part consists of 56 pages of discussions on the problems of testing and its place in school and business. Part 2 consists of tests on all phases of business abilities, as tests in letter-

writing, typewriting, bookkeeping, English, arithmetic, etc. The tests are designed to measure students' work in terms of business standards. One handbook is needed for each pupil to be tested. The book contains complete directions for use.

Publishers: World Book Co., Yonkers-on-Hudson, N.Y.

Price: \$1.20 per copy, postpaid.

A Series of Tests in Gregg Shorthand: Tests B1 and B2, Speed in Writing. By Elmer Hoke. Published: 1922. Purpose: to measure pupil's ability to write shorthand. Range: any class in shorthand. Time to give: 2 minutes. Time to score: about 3 minutes. Standardized: scores made at various times.

There are 2 forms, B1 and B2. Each test is composed of an article of 400 words. The article is printed in both longhand and shorthand. B1 and B2 are similar in construction and arrangement. The pupils are to copy the shorthand as neatly and as rapidly as possible in the space left for that purpose. One test of each used is needed for each pupil to be tested. A key for scoring is available.

Publishers: The Gregg Publishing Co., Chicago and New York.

Price: Complete set of 13 tests, 30 cents net. Single copies, 3 cents each.

A Series of Tests in Gregg Shorthand: Test A-1, Reading Ability. By Elmer Hoke. Published: 1922. Purpose: to measure pupil's ability to read shorthand. Range: classes in shorthand. Time to give: 3 minutes. Time to score: about 5 minutes. Standardized: scores made at various dates.

The test is composed of 2 business letters to be read. It is necessary at times for the pupil to make a choice of words. He is to underscore the correct word so that the letter will make sense. Speed and accuracy are both important. One test is needed for each pupil to be tested. Directions for giving and a key for scoring are available.

Publishers: The Gregg Publishing Co., New York City, Chicago, and Boston.

Price: Complete set of 13 tests, 30 cents net. Single copies, 3 cents each.

Measuring Scale for Gregg Shorthand and Penmanship. By Elmer R. Hoke. Published: 1922. Purpose: to measure pupil's ability to write shorthand. Range: pupils studying shorthand. Time to give: 2 to 5 minutes. Time to score: about 5 minutes. Standardized: scores made at various dates.

The scale is composed of 16 samples of shorthand writing, ranging in value from 0 to 95. A sample of shorthand may be measured by sliding it along the scale until a specimen of corresponding quality is found. "The number above it represents the value of the sample of shorthand penmanship being graded." One scale is needed for each teacher or examiner.

Publisher: Gregg Publishing Co., New York City, Chicago, Boston, San Francisco.

Price: 25 cents net.

A Series of Tests in Gregg Shorthand: Tests C1-10 Vocabulary. By Elmer Hoke. Published: 1922. Purpose: to measure pupil's ability to use the 1,000 most common words and the 500 most common phrases. Range: classes in shorthand. Time to give: not "time limit" test. Time to score: 1 minute each. Standardized: scores made at various dates.

The tests are composed of a series of 10 tests. Each test contains 100 common words and 50 common phrases. Since the tests contain the 1,000 most common words and the 500 most common phrases, they are excellent teaching devices as well as tests. One test of each used is needed for each pupil to be tested. A key for scoring and standard scores are available.

Publishers: The Gregg Publishing Co., New York City, Boston, and Chicago.

Price: complete set of 13 tests, 30 cents net; single copies, 3 cents each.

Prognostic Test of Stenographic Ability. By Elmer Hoke. Published: 1922. Purpose: to predict stenographic ability. Range: pupils studying stenography. Time to give: 20 to 30 minutes. Time to score: 4 minutes each. Standardized: in process of standardization.

There are 6 tests, as follows: (1) Motor reaction, (2) Speed of writing, (3) Quality of writing, (4) Speed of reading, (5) Memory, (6) Spelling, (7) Symbols. Motor reaction is tested by having the pupils make marks in small boxes or parallel lines with cross-sections which they construct on the test paper. Speed in writing is measured by the number of words written per minute. Quality of writing is measured by the pupil's ability to read his own notes. The other tests are made up of appropriate material to bring out the qualities intended to be measured. One test is needed for each pupil to be tested. Directions for giving and a key for scoring are available.

Publisher: Elmer R. Hoke, Lebanon Valley College, Annville, Pa., or Gregg Publishing Co., 285 Fifth Ave., New York City.

Price: This is in experimental stage. 1½ cents each for experimental material.

Rogers' Stenographic and Typist Tests. By Herbert W. Rogers and Margaret Jaques. Published: Journal of Applied Psychology, 1917. Purpose: to measure stenographic ability. Range: stenographers. Time to give: 15 minutes. Time to score: 3 minutes. Standardized: September and April scores.

Dr. Rogers has developed 6 stenographic tests which are claimed to have a high degree of correlation with actual facts known. "In order to demonstrate the value of these particular tests, they were given to stenographers who were employed long enough by a firm so that their actual ability and worth was known. In every case the results correlated exactly with actual ability."

Publishers: C. H. Stoelting Co., 3037-3047 Carroll Ave., Chicago.
Price: \$6.50 per 100 tests with blank and directions for use.

Thurstone's Typist Test. By L. L. Thurstone. Copyright: 1922, World Book Co. Published: 1920. Purpose: to select office clerks; for typists and junior stenographers. Time to give: not a "time limit" test. Time to score: no information. Standardized: no information as to time for which standards are made.

The test is composed of 3 parts. Part 1 consists of a typewritten copy that has been corrected. The pupil is to write it as corrected. Speed and accuracy are important factors. Part 2 consists of a number of items to be written in tabular form under the proper headings. Part 3 consists of 60 words, some of which are misspelled. The pupil is to cross out the words that are incorrectly spelled. One test is needed for each pupil to be tested.

Publisher: L. L. Thurstone, World Book Co., Chicago, Ill.

Price: 25 booklets with directions and key, \$1.50 net.

Thurstone's Clerical Examination. By L. L. Thurstone. Copyright, 1922, World Book Co. Published: 1919. Purpose: to measure ability to do clerical work. Time to give: 30 to 45 minutes. Time to score: short. Standardized: no information as to time of year for which standards are made.

The examination is composed of 8 tests measuring different phases of clerical ability. Test A measures ability to check errors in figures, Test B to detect words spelled incorrectly in written matter, Test C is a cross-out test, etc. The pupil's score is a combination of his speed and accuracy ranks. The pupil is given all the time he desires to complete the examination. The basis for speed is determined by keeping the time the pupil begins and the time he returns his paper. The manuals of directions contain complete directions for use.

Publishers: World Book Co., Yonkers-on-Hudson, N.Y.

Price: package of 25 examination booklets with one direction and one key, \$1.50 net; specimen set, 15 cents.

VOCABULARY

Carr's English Vocabulary Test, Forms A, B, C, and D. Published: September, 1921. Range: grades 7 to 12 inclusive. Time to give: 20 minutes. Time to score: 1 minute with stencil. Standardized: for ninth grade, beginning and end of first semester, and end of second semester.

The test consists of 50 sentences having one word in each sentence in italics. In the even-numbered sentences, the italicized words are of Latin derivation, and in the odd-numbered sentences they are of non-Latin origin. After each sentence are 5 words or phrases, one of which is supposed to explain the meaning of the italicized word. The pupil is to underline that word or phrase. One test, of the form used, is needed for each pupil.

Publisher: American Classical League, East High School Annex, Rochester, N.Y.

Price: 1 cent each.

Minnesota Visual Vocabulary Test. By M. E. Haggerty, University of Minnesota, Minneapolis, Minn. Out of print and no information available.

Holley Sentence Vocabulary Scale. By Charles E. Holley. Published: 1919. Purpose: to measure pupil's vocabulary. Range: grades 3 to 12. Time to give: not "time limit" test. Scoring: short. Standardized: age standards, not dependent on the school year.

The scale is composed of 2 series, 3A and 3B. Series A is for grades 3 to 8 and is composed of 70 statements. Each statement has 4 words written after it. A line is to be drawn under the word which will make the statement a true sentence. Series B is for grades 7 to 12 and is composed of the same number of statements as Series A. It is similarly constructed and administered. One copy of each test is needed for each pupil to be tested. Complete directions are printed on the tests.

Publishers: Public School Publishing Co., Bloomington, Ill.

Price: 80 cents per 100, each series. Sample set, 6 cents.

First-Grade Reading Vocabulary Test. By S. L. Pressey. Published: 1921. Purpose: to measure vocabulary. Range: grade 1. Time to give: 5 minutes. Time to score: 15 seconds. Standardized: May scores.

The test consists of groups of letters, some of which are words. There are 26 lists and each list contains one word. The pupil is directed to draw a line around the word. The children should be aided to work out several of them to familiarize them with what they are to do. One test is needed for each pupil to be tested. Directions for scoring and recording are available.

Publishers: Department of Psychology, Indiana University, Bloomington, Ind.

Price: 90 cents per 100.

Scale of Attainment, No. 2 (American History, Arithmetic, English Grammar, and Reading Vocabulary). By L. W. Pressey. For description see History.

Starch's English Vocabulary Test. By Daniel Starch. Published: 1915. Purpose: to measure range of reading vocabulary. Range: grade 4 to senior year of college. Time to give: about 15 minutes. Time to score: 2 or 3 minutes. Standardized: June scores.

The test consists of 2 lists of words of 100 words each. The pupils are allowed as much time as they need. A check mark is placed after each word the pupil is sure he can use correctly. Words with which the pupils are familiar but are not sure of the meaning are checked. The teacher may select such of the words that are checked as she thinks necessary and have the pupil give the meaning. One test is needed for each pupil to be tested. Directions are printed on the tests.

Publishers: University Coöperative Co., 508 State St., Madison, Wis.
Price: 80 cents per 100. Directions sheet for examiner, 2 cents per copy.

Southington-Plymouth English Vocabulary Tests. Also called "Witham's English Vocabulary Tests". By E. C. Witham. Published: 1921. Purpose: to measure pupil's vocabulary. Range: grades 5 to 12. Time to give: 20 minutes. Time to score: $\frac{1}{2}$ minute. Standardized: no information as to time of year for which tests are standardized.

The test is composed of 100 words selected from the Ayres Measuring Scale for Ability in Spelling and from the Thorndike Reading Scale A-2 Word Knowledge or Visual Vocabulary. Ninety words were selected from the Ayres' scale and ten from the Thorndike scale. The test is in 2 separate parts, 1 and 2, each part including 50 words. On the opposite page from each list of 50 words are definitions. The pupils are directed to write the number corresponding to each word before the definition of that word. One test is needed for each pupil to be tested. Especially suitable for junior and senior high schools. Directions for use and tentative standards are printed on the tests.

Publishers: J. L. Hammett and Co., Kendall Square, Cambridge, Mass.

Price: Sets of 50, \$1 per set including directions.

VOCATIONAL

The Army Trade Tests. By William T. Bawden. Published: 1918. Purpose: classification of men according to their ability to do certain types of work. Range: used in the United States Army. Time to give: no information. Time to score: no information. No information as to standards.

The tests consist of oral tests, picture tests, and performance tests. The oral test consists of 40 questions. The picture tests consist of pictures on which questions are asked. In the performance test the applicant is required to do a piece of work. His only guide is a blue print and printed instructions. These tests have not been printed for general distribution.

Publisher: W. T. Bawden, Department of Interior, Bureau of Education, Washington, D.C.

Price: not printed for general distribution.

Vocational Tests, IX, XI, XIII, XIV, and Interest Analysis. By Bureau of Personnel Research, Carnegie Institute of Technology, Pittsburgh, Pa. Published: 1920, 1921. Purpose: to measure vocational ability. Range: high school and college. Time to give: from 10 to 25 minutes each. Time to score: from 2 to 7 minutes each. Standardized: any time of year.

There are 5 separate tests, as follows: IX, Will Profile; XI, Social Relations; XIII, Business Information; XIV, Meeting Objections; Inter-

est Analysis. Test IX is made up of 11 parts designed to measure traits of character and temperament which are essential to business. Such traits as speed of movement, speed of decision, care for details, etc., are measured. Test XI is composed of 2 forms, A and B. Each form is made up of 50 questions designed to find out how much one has mingled with all kinds of people. Each question is followed by 4 or more answers, one of which is correct. The applicant is to check the correct answer. Test XIII is composed of 100 questions designed to measure business information. The questions are arranged in the form of an intelligence test. Test XIV is composed of 25 questions designed to measure the ability of salesmen to meet objections of customers. The Interest Analysis Test is composed of 4 parts designed to measure business interests. It contains about 300 questions concerning one's likes and dislikes. The tests may be used separately. One test is needed for each person to be tested.

Publishers: Bureau of Personnel Research, Carnegie Institute of Technology, Pittsburgh, Pa.

Price: Tests IX and XIII, 10 cents each; XI and XIV, 8 cents each; Interest Analysis, 6 cents each.

Bricklayers' Test. By J. Crosby Chapman and Herbert A. Toops. Published: 1919. Purpose: to conserve time in selecting workmen. Range: for novices, apprentices, and journeymen. Time to give: not "time limit" test. Time to score: short. Standardized: no information as to time of year for which standards are made.

The examination is composed of 18 questions, based on the multiple choice answer method. Each question has 4 answers one of which is correct. The applicant is to draw a line under the answer that will make the statement correct. One test is needed for each person examined.

Publishers: Henry Holt and Co., New York City, or J. Crosby Chapman, Western Reserve University, and Herbert A. Toops, Teachers College, Columbia University, New York City.

Price: no information.

A Written Trade Test: Multiple Choice Method. By J. Crosby Chapman and Herbert A. Toops. Published: 1919. Purpose: to distinguish between novices, apprentices, journeymen, and experts. Range: bricklayers. Time to give: 30 minutes. Time to score: 3 minutes. Standardized: no information as to time of standardization.

The test is made up of 62 questions. Each question has 4 answers, 3 of which are incorrect. Trade terms were used almost exclusively in the 4 answers. Two methods of examination may be used. The first method employs the entire list of 62 questions; the second method uses 18 questions selected by experts. Both methods have been found to be very effective in dividing the applicants into proper groups except in case of journeymen and experts. The test is not effective in selecting journeymen from so-called experts.

Publishers: J. Crosby Chapman and Herbert A. Toops (same as above).

Price: not printed for general distribution.

Business Tests. By T. B. Homan, Education Department, Iowa State Teachers College, Cedar Falls, Iowa.

The above tests consist of a suggestion as to the tests to be used in testing applicants for each department in a department store, and the following list of tests: (1) Comparison of Lines. (2) Comparison of Figures. (3) Memory Test. (4) Tapping Test. (5) Complementary Color Test. (6) Human Figure Form Test. (7) Dictation Test. (8) An Imagination Test. (9) Detection of Error Test. (10) Spelling Test. (11) Sorting Test. (12) A Test of Judgment.

Publisher: Professor T. B. Homan, Education Department, Iowa State Teachers College, Cedar Falls, Iowa.

Price: Memory Test, 14 cents each, including directions and score key; Imagination Test, 1 cent each, with directions and score key; Judgment Test, 3 cents each with directions and score key.

Leavitt's Preliminary Tests for Manual Arts. By Frank M. Leavitt.

Published: never been published. Purpose: to measure ability in industrial arts. Range: grades 1 to 8 inclusive. Time to give: 20 minutes. Time to score: no information. Standardized: no information.

The test is composed of 18 problems of increasing difficulty in drawing, measuring, cutting, pasting, sewing, etc. It contains some of the most common problems in the industrial arts work. The test is suited for both boys and girls. One test is needed for each pupil to be tested. Instructions for giving and scoring are available. Mr. Leavitt says that until we have first established more definite objectives for manual arts, it is rather futile to attempt to measure progress in this field.

Publisher: Frank M. Leavitt, Assistant Superintendent of Vocational Education, Pittsburgh, Pa.

Price: no information.

Stenquist Assembling Test for Mechanical Ability (U.S. Army). By John L. Stenquist. Published: 1915, Archives of Psychology, No. 33, Columbia University; final form, 1921. Range: grades 3 thru high school, and adult. Time to give: 30 minutes. Time to score: about 60 minutes to score 30 tests. Standardized: yes, on about 2,000 cases, by ages.

Publisher: C. H. Stoelting and Co., Chicago, Ill.

Price: one complete set including directions for giving and scoring and also answer key, \$12.50.

Stenquist Mechanical Aptitude Tests. By John L. Stenquist. Published: 1921. Purpose: to detect mechanical aptitude in children. Range: from grade 6 to senior year of college. Time to give: Test I, 45

minutes; II, 50 minutes. Time to score: about 2 minutes. Standardized: no information as to time standards were made.

There are 2 separate tests similar in construction. Pictures of mechanical objects are given with questions about relationships. The tests presuppose no mechanical experience. The author claims a correlation of .84 with shop and science teacher's estimates of ability. One test of each given is needed for each pupil to be tested. A manual of directions for administering is available.

Publisher: World Book Co., Yonkers-on-Hudson, N.Y.

Price: Tests I and II each \$1.50 net for package of 25 booklets, including 1 key and 1 record sheet. Manual of directions, 20 cents net. Specimen sets, 30 cents including 1 of each of tests, 1 key for each test, 1 record sheet, and 1 manual.

Thurstone's General Technical Information Test. Copyrighted: 1919, by Carnegie Institute of Technology; copyrighted: 1922, by World Book Co. Purpose: no information. Range: high school seniors and college freshmen. Time to give: no time limit. Time to score: no information. Standardized: no information.

See Thurstone's Vocational Guidance Tests.

Publisher: World Book Co., Chicago, Ill.

Price: \$1 net per package of 25 with 1 key and 1 record sheet.

Thurstone's Vocational Guidance Test (Algebra, Arithmetic, Geometry, Physics, and Technical Information Test). By L. L. Thurstone. Published: 1919. Purpose: to determine the probability of success of high school seniors and college freshmen in an engineering school. Range: no information. Time to give: about 30 minutes for each part. Time to score: short. Standardized: no information.

There are 5 tests: Algebra, Arithmetic, Geometry, Physics, and Technical Information. "The items in the tests were selected as having a direct appeal to pupils with engineering interests. Careful statistical study has shown that the tests will predict the probable success of a pupil more accurately than will high school scholarship." Thirty minutes are allowed for each test. "The tests, of four pages each, are put up in packages of 25 with key and record sheet (except that Geometry Test has no key)." One set of tests is needed for each pupil to be tested.

Publisher: World Book Co., Yonkers-on-Hudson, N.Y.

Price: Algebra Test, \$1 net per package of 25. Arithmetic Test, \$1 net per package of 25. Geometry Test, \$1 net per package of 25. Physics Test, \$1 net per package of 25. Technical Information Test, \$1 net per package of 25. Manual of directions, 20 cents net.

Each package, except the Geometry, contains 1 key and record sheet.

Specimen Set: an envelope containing 1 copy of each of the 5 tests, a key for each test (except Geometry Test), manual, and a record sheet, 40 cents postpaid.

Thurstone's Employment Tests. By L. L. Thurstone. For description see Thurstone's Typist and Clerical Tests.

Thurstone's Test of Engineering Aptitude for College Freshmen and High School Seniors. By L. L. Thurstone. Published: 1919. This test is out of print. Refer to Vocational Guidance Test, above.

Trade Tests in Education. By Herbert A. Toops. Published: December, 1921.

The Trade Tests in Education are not published in pamphlet form but in a book which gives illustrations of different forms of tests and methods of measuring trade efficiency. "By reference to these and the numerous hints of caution derived from extended observation, study and analysis of tradesmen's capacities and aptitudes, one may construct for himself highly reliable tests for measuring the effects produced by any specific vocational or technical training." Dr. Toops says this test was the title of his dissertation for the doctor's degree presented at Teachers College, Columbia University, in 1921. "It is thought of as a contribution to method rather than to the supply of available tests."

Publisher: Bureau of Publications, Teachers College, Columbia University, New York City.

Price: \$2, cloth; \$1.50, paper.

Farmers' General Information Test. By H. A. Toops, Teachers College, New York City. Published: 1921. Range: grades 7 and 8 and high school. Time to give: 30 minutes. Time to score: 5 minutes. Rough standards from farmers and college students available. Not prepared for general distribution. Printed in entirety in Teachers College, Columbia University, Contributions to Education, No. 115.

Tests for Measuring Attainments in Agriculture for Rural Schools. By Logan A. Waits. Published: have not been published. Purpose: to measure attainment and "general intelligence in the subject of agriculture". Range: grades 2 to 12. Time to give: 20 minutes for each test. Time to score: not given. Not standardized.

The tests are composed of 2 series, A and B. Series A is for grades 9, 10, 11, and 12. Series B is for grades 7 and 8. Each series is composed of 2 parts. Series A is made up of 10 tests, 5 in each part. Test I is a completion test; Test II is composed of 20 words to be arranged under their proper headings; Test III, proper seeding for 10 crops, etc. Series B is similar to Series A in arrangement. The test has never been published for distribution.

Publisher: Logan A. Waits, New Philadelphia, Ohio.

Wardner's Test for Knowledge of Tools. By Charles A. Wardner. Published: March, 1919. Purpose: to test pupil's knowledge of tools. Range: industrial classes above grade 8. Time to give: 60 minutes. Time to score: 1 minute. Standardized: not standardized.

The test consists of a knowledge of 83 pieces of wood-working, metal-working, and miscellaneous tools. The tools are numbered from 1 to 83 and a photograph made of them and their numbers. The names of the tools are written on the opposite page. The pupils are

to write the number of each tool before its name. One test is needed for each pupil to be tested.

Publisher: Charles A. Wardner, Jackson, Mich.

Price: test sheets, 2½ cents each.

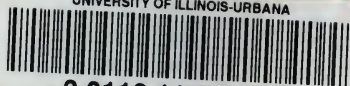
ZOÖLOGY

Caldwell's Science Tests (Botany, Chemistry, Physics, Zoölogy). See heading General Science.

Grier's Range of Information: Tests in Biology, Physiology, Zoölogy, and Botany. By N. M. Grier. See heading Biology.

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